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ACADEMY OF NATURAL SCIENCES
OF
PHILADELPHIA.

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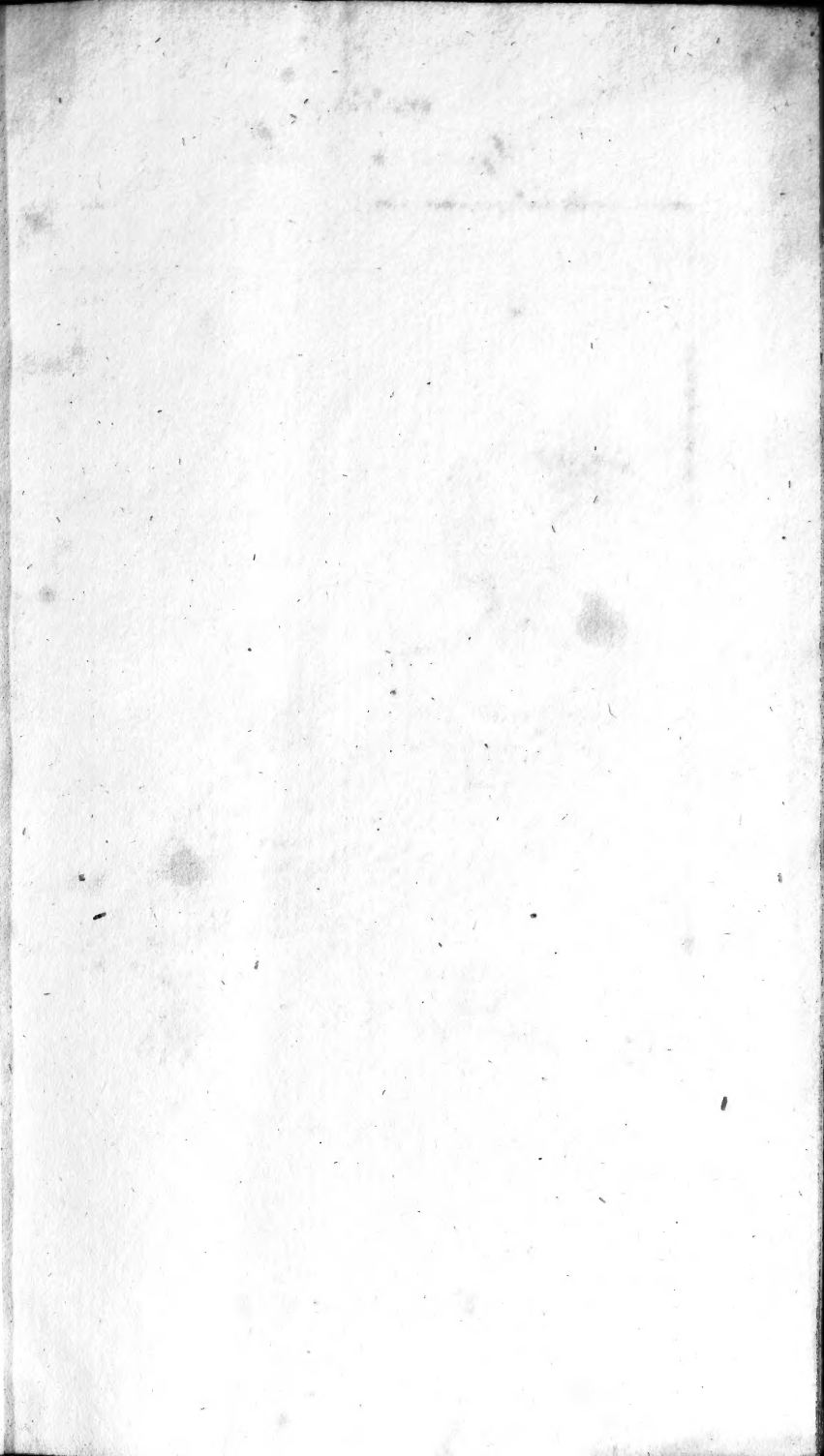
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ORDER
Genus 1 Vulture.



VULTURE.

*Birds general
(3 vols)*

J. Maxwell

THE

Natural History

OF

BIRDS;

CONTAINING

A VARIETY OF FACTS,

SELECTED FROM SEVERAL WRITERS,

ILLUSTRATED WITH

Upwards of One Hundred Copper-plates.

IN THREE VOLUMES.

VOL. I.

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V. 1

P R E F A C E.

THIS work is professedly a compilation, but it would have been embarrassing, and unnecessary, to have referred every passage to the author from whom it was taken.

Candour, however, requires the acknowledgment, that LINNÆUS, BUFFON, PENNANT, and LATHAM have furnished almost the whole of the materials, although other natural historians of less note, have occasionally been consulted.

It is intended to comprize the six orders of birds, arranged according to the system of LINNÆUS.

The object proposed, being to combine amusement with instruction, those parts which are merely descriptive of the plumage, or the colours of the birds, are introduced as little as appeared consistent with the whole of the design; and a style has been attempted suitable to the capacity

of a child, consisting of short sentences, and familiar and obvious expressions.

The generic characters do not, perhaps, come under this description; they are for that reason printed with a different type, and will be easily distinguished: yet a regard to system, and the purpose of instruction, render them necessary. It should also be remember'd, that these terms are the names of visible objects, and therefore the more easily acquired by children: the case is widely different with those words which are intended to express abstract ideas, because there the ideas themselves are not within the comprehension of a child. It may be further observed, that, in order to facilitate the acquirement of any science, it is essential to learn the terms which are generally employed by those who write upon it.

This little compilation was made for the children of a particular family: and it is much at the service of others, who may approve the plan, and incline to adopt it.

INTRODUCTION.

The Animal Kingdom consists of Bodies which are organized, endowed with Life, with Feeling, and the Power of voluntary Motion.

Linnæus divides this Kingdom into Six Classes.

FIRST CLASS

Is viviparous (that is, produced alive;) the mother is furnished with milk for its young. The heart has two auricles and two ventricles. The blood is warm and red. The lungs breathe reciprocally. The jaw-bones lie one over the other; they are covered and have several teeth fixed in them. This class is called by Linnæus *Mammalia*.

SECOND CLASS

Is oviparous (that is, produced from eggs) which have a calcareous shell. The heart has two auricles and two ventricles. The blood is warm and red. The jaws, or mandibles, lie one over the other; they are naked, they project, and are not furnished with teeth. The ears have no auricles, or external ears. Their supports are two legs and two wings. Their bodies are covered with feathers, and they are called *Aves*, or Birds.

THIRD CLASS

Breathe *arbitrarily* from lungs, (that is, though breathing be necessary to them, it is not requisite at

short intervals.) The heart has one auricle and one ventricle. Their blood is cold and red. Their jaw-bones lie one over the other. The eggs of most are covered with a skin. They have a naked skin-like covering. They are called *Amphibia*, or Amphibious Animals.

FOURTH CLASS

Have external gills. The heart has one auricle and one ventricle. The blood is cold and red. Their jaws lie one over the other. Their eggs have no white. They are without ears. They are covered with scales which lie one over another. They have fins for swimming, and are called *Pisces*, or Fish.

FIFTH CLASS

The heart has one auricle and one ventricle. They have a cold sanies instead of blood. Have antennæ, or a kind of horns; but no brains, ears, or nostrils. They breathe through vent-holes arranged along their sides. Their jaws are placed cross-wise. They are covered with a kind of bony skin. They are called *Insectæ*, or Insects.

SIXTH CLASS

The heart has one auricle and one ventricle. They have a cold sanies instead of blood. Their breathing holes are obscure. The jaws are various, in various kinds. Their senses consist in their tentacula. They have no heads, ears, or nostrils, or scarcely eyes:
Sometimes

INTRODUCTION.

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Sometimes they have a calcareous covering or shell; sometimes they are covered with spines, and sometimes they have no covering. They have neither feet nor fins. They are called *Vermes*.

The whole Class of Birds is divided into Six Orders.

The first Order is called *Accipitres*; their beaks are hooked, their legs strong, their claws bowed and sharp, their bodies muscular; they live on prey, build on high, lay about four eggs; they pair; and the female is the most strong and beautiful.

Second Order is called *Picæ*; their beaks are compressed and convex on the back, their legs rather strong, their food various; they pair, build mostly in trees, and the male bird feeds the female whilst she sits.

Third Order is called *Anseres*; in many Genera the beak filters the water and retains the food; is widest at the end and covered with a skin; the feet are webbed for swimming, their feathers are the most useful of any kind, their nests are generally built on the ground, the mother seldom broods the young, and many of the genera do not pair.

Fourth Order is called *Grallæ*; the beak in general is long, slender and cylindric; the legs are formed for wading, with thighs half bare of feathers; the tail short, their flesh well tasted; they procure

their food out of marshy situations; their nests are mostly on the ground.

Fifth Order is called *Gallinæ*; the upper mandible is channelled, extending with a margin above the lower, and a little bowed; the nostrils are covered with a cartilaginous membrane; they live upon grain, dust themselves, make an artless nest, and lay many eggs.

Sixth Order is called *Passeres*; the beak is conic and sharp at the point, their toes are divided, they feed on grain, insects and seeds; their nests are curious, they pair, and many of them sing.

Some natural Historians have introduced another Order between the *Grallæ* and *Gallinæ*, which they call *Struthious*: under this they have placed the Ostrich and Cassowary, (which Linnæus has arranged under the *Grallæ*;) and the Dodo (which Linnæus places among the *Gallinæ*).

They have likewise divided the Sixth Order of the *Passeres* into two others.

- 1st. The *Columbæ* or *Columbine*, including Pigeons and Doves.
- 2d. The *Passeres*, or the remainder of those which Linnæus has placed with the *Passeres*, many of which are distinguished by their song.

THE
NATURAL HISTORY
OF
B I R D S.

ORDER I. ACCIPITRES.

GENUS I. VULTUR.

THE VULTURE.

The beak is strait, except towards the end, where it is hooked, it is covered at the base with a thin skin.

There are no feathers on its head, or the upper part of its neck, but instead of feathers, a soft hairy down.

The tongue is bifid, that is, cloven, or divided at the point.

THERE are several kinds of Vultures ; and they are found, some in the southern parts of Europe, some in Asia, some in Africa, and in the warmer parts of America.

They feed upon serpents, upon the eggs of crocodiles, and of alligators, and upon dead carcases, which they can smell a great way off.

In America there are many wild horses and wild cows; the hunters kill them in order to get their skins, and they leave the dead bodies upon the ground: all this time the Vultures are flying after and watching them; and as soon as the hunters are gone, they come down in great numbers, and devour the bodies that are left. They are so greedy, and sometimes eat so much, that they cannot fly from the place until they have brought up part of it again.

There are Vultures at the Cape of Good Hope, in Africa. When an ox or a cow is tired, and lies down in the field, the Vultures will sometimes fly down upon it in great numbers, whilst it sleeps. They make a hole in its stomach, and eat out all its inside; then they pick all the flesh clean from its bones; so that if the skin were taken off there would be nothing left but a skeleton.

There are many Vultures in other parts of Africa, and at Grand Cairo, which is in Egypt, and by the river Nile. The Vultures, and the wild dogs together, eat all the dead bodies that they can find. They are of great use there; for

if they did not eat them, the smell would be very hurtful to the health of the people who live in those hot countries.

In the river Nile there are numbers of crocodiles, who come out of the water to lay their eggs, which they bury in the ground. The Vultures sit upon the trees and watch the crocodiles, and as soon as they are gone into the river, they fly down and scratch up the eggs, and eat them.

The King of the Vultures is the most elegant bird of this kind. It is found in South America. His head and neck are covered with a flesh-coloured skin; behind the head it is of a deep red, and round his neck he has a loose ruff of feathers; into this skin he can draw back and hide his head.

There is one kind of Vulture in Mexico, in America, that can raise the feathers behind its head, in the form of a crown; and it is said, that with one stroke of its bill it could break the skull of a man.

But the Condor is the largest Vulture of all; it is the size of a sheep; and when its wings are opened they are thirteen or fourteen, and some say eighteen feet across.

One Condor is strong enough to kill a cow, and two of them can devour it: when it flies
down

down upon the ground, its noise is almost loud enough to make one deaf.

Sometimes it will venture to attack a boy of ten years of age, and often carries off a sheep or a deer, and flies away with it in its talons; and it will take little children, if it can find them, to feed its young ones.

The Condor is found in the Andes, in South America; the Andes are the highest mountains in the world.

The claws of the Vulture are not so hooked as those of the Eagle, because they walk more upon the ground. Their eyes are not at all sunk in their heads. They build their nests amongst rocks, very difficult to come at, and lay two or three eggs.

They smell very disagreeably, and a very offensive humour is constantly running from the nostrils of some of them.

Under the feathers there is a fine down; and at Grand Cairo their skins are sold and made into very comfortable dresses.



ORDER 1
Genus 2 Falco.



E A G L E .

GENUS 2.

F A L C O.

THE F A L C O N.

The whole beak of the Falco kind is hooked; it has a cere, which is a naked waxy skin, that covers the base of the beak. The nostrils are small, oval, and placed in the cere.

The head is closely covered with feathers; and the tongue is divided at the point. The legs and feet are scaly.

THERE are many species of the Falco genus, viz. Eagles, Falcons, Buzzards, Hawks and Kites.

There are Eagles in every quarter of the world; in Europe, Asia, Africa, and America.

The Eagle can see farther and better than any bird; but cannot smell so well as the Vulture. It never eats any thing which it does not kill itself; and when it has eaten as much as it wants at once, it flies away, and does not come back to the same thing any more.—So that the Eagle is not nearly so greedy as the Vulture.

Eagles carry away fawns, and kids, and lambs, and hares, and rabbits, and partridges, and a great many other little animals, to feed their young ones;

ones; sometimes an Eagle will kill a calf and drink its blood; but they never fly together in flocks, as the Vultures do; for only two Eagles live in the same place.

They live a long time, sometimes more than an hundred years: and some have imagined that they at last die of hunger; for when the Eagle is very old, its upper mandible (or the upper bill) grows so crooked, that some have thought it could not feed itself.

If it die of hunger, when very old, (which perhaps may be a mistake,) it can live a long time without eating.

The Emperor of Germany had one at Vienna, and the keeper forgot to give it any food for twenty-one days; yet it did not die.

There are many different kinds of Eagles.

One kind is called the Golden Eagle: when these Eagles grow old, the feathers of their heads, which were brown, turn grey.

They breed in high cliffs in the mountains of Ireland; and sometimes they are found in Caernarvonshire, in Wales, and on the mountain of Snowden which is in Wales.

There were two Eagles that built their nest near a poor man's house in Ireland; the man had a large family of children; and every day when the

the old Eagles were gone, he climbed up to their nest and took away for his family a part of the fawn, and some of the hares, and rabbits, and partridges, which they had brought for their young ones. When the little Eagles were almost ready to fly, he cut their wings, to keep them in their nests; and the old ones continued to bring them hares, and kids, and rabbits, a great while longer.

In the Lake of Killarney, which is in Ireland, there are several islands. In one of these islands two Eagles had built their nest, and hatched their young. A thoughtless boy went to rob this nest, he pulled off his clothes, and swam to the island, when the old Eagles were away, and he was so cruel as to steal their young; he tied them with a string, and had waded into the lake until the water reached up to his neck, and then began to swim.

The old Eagles were coming back to their nest, and saw him taking away the Eaglets (or young Eagles); so they flew down upon him, and with their strong crooked beaks, and strong crooked talons, they soon killed him.

Eagles kill and devour poultry. In the Orkney Islands, which are a little north of Scotland, if any man kill an Eagle, every family in the parish is obliged to make him a present of a hen. In
those

those countries where Eagles live, it is not safe to leave infants out of doors. Two little children in Scotland were carried away by some Eagles to their young ones; but the Eagles were seen as they were flying away, and some people climbed up to their nests, and brought away the infants before they were much hurt.

The emperor of Thibet, in Asia, has many Eagles, who are taught to hunt and kill hares, deer, and foxes; and some of them have so much courage, that they fly down upon the wolf, and attack him with great fury. Another kind of Eagle is called the Black Eagle; there are many of these in Scotland; they will kill deer, and in the island of Rum, (which is on the western coast of Scotland) there is not one left; the Eagles have killed them all.

Once there was found in the Peak of Derbyshire a nest of the Ringtail Eagle; it was made of great sticks; one side rested on the edge of a rock, the other on two birch-trees; upon the sticks there was a layer or covering of rushes; over the rushes, a covering of heath; and then another layer of rushes. There was only one young one found in the nest, and an addle egg; by these were three heath-cocks, a lamb, and a hare;

hare; the nest was quite flat, and about two yards across.

There are other Eagles, called Sea Eagles, and Ospreys. They live upon fish, which they take by darting down upon them as the fish are swimming near the surface of the water. Their legs have no feathers.

The Osprey builds its nest on the ground among reeds, and lays three or four eggs; its outward toe easily turns backwards, and the claw of that toe is larger than the claw of the inner toe, which is very useful to the Osprey for holding the fish, which are slippery.

Besides these, there is the Bald Eagle of North Carolina, which was one of the English settlements in North America. The Bald Eagles breed all the year round; for when the young are covered with down, the old Eagle lays eggs in the nest, and leaves them to be hatched by the warmth of the Eaglets.

The Bald Eagles cannot fly very fast, but there are fishing hawks in America, which plunge into the water, and catch the fish: the Bald Eagle watches them, and whilst the hawk is loaded with his prey, flies after him. The hawk is afraid, and, to escape, lets fall the fish, and the Eagle catches it before it reaches the water. The Bald
Eagle

Eagle watches the fowlers when they go out a shooting, and is sure to catch all the little birds that they wound.

Besides the Eagle, there are many other birds of the falcon kind, but they are all smaller than the Eagle. The Gentil Falcon is found in the Alps, which are very high mountains that divide France and Switzerland from Italy. These Falcons are frequently caught, and made tame, and taught to fly after pigeons, and little birds, and to kill them.

There is in India an animal called the Antelope; it is swifter than a Greyhound, and will not suffer a man, with a gun, to come near it.

In order to catch the Gazelle, or Antelope, they take a Falcon and Greyhounds, and when they see the Antelope, the Falcon flies after him, and alighting upon his head flaps his wings, so that the poor Antelope cannot see which way to run; then the Greyhounds readily overtake and catch him. Sometimes Herons are taken by Falcons. The Heron is a larger bird than the Falcon, and stronger, and has besides a very long beak. The Falcon endeavours to fly above the Heron, and frequently they rise so high as scarcely to be seen from the ground. If the Falcon
get

get uppermost, he strikes his talons at the wing of the Heron, so that the poor Heron, being disabled from flying, may fall to the ground and be caught. But if the Falcon should miss his stroke, then the Heron strikes his bill through the Falcon, and kills him. There are several other Falcons used for killing game, and they have all long wings.

Besides the long-winged Falcons, there are others, which have shorter wings, and they are called Hawks and Kites.

The Kite has a forked tail, like a Swallow. In this it differs from all other birds of the Falcon kind, and its wings are longer than the Hawk's; he is almost always suspended in the air, and his flight is so easy, that he seems to swim, or glide, rather than to fly. He uses his tail to direct his course. Kites are very apt to destroy little chickens. At Constantinople, which is the capital of Turkey in Europe, they are very fond of Kites, for they are of the same use there, as the Vultures near Grand Cairo, in Egypt; and they are so tame, that they fly towards those who whistle to call them.

Busbéquius says, that he ordered the inside of a Sheep to be cut into small pieces; he whistled to the Kites, and many flew about him; and
when

when he threw the small pieces of the Sheep into the air, they would catch them before they could fall to the ground.

The Buzzard is a short-winged Falcon. If the hen Buzzard should by any accident be killed, the cock will sit upon the eggs, and hatch the young ones. It lays its eggs sometimes in a Crow's nest, which it makes larger, and lines with wool.

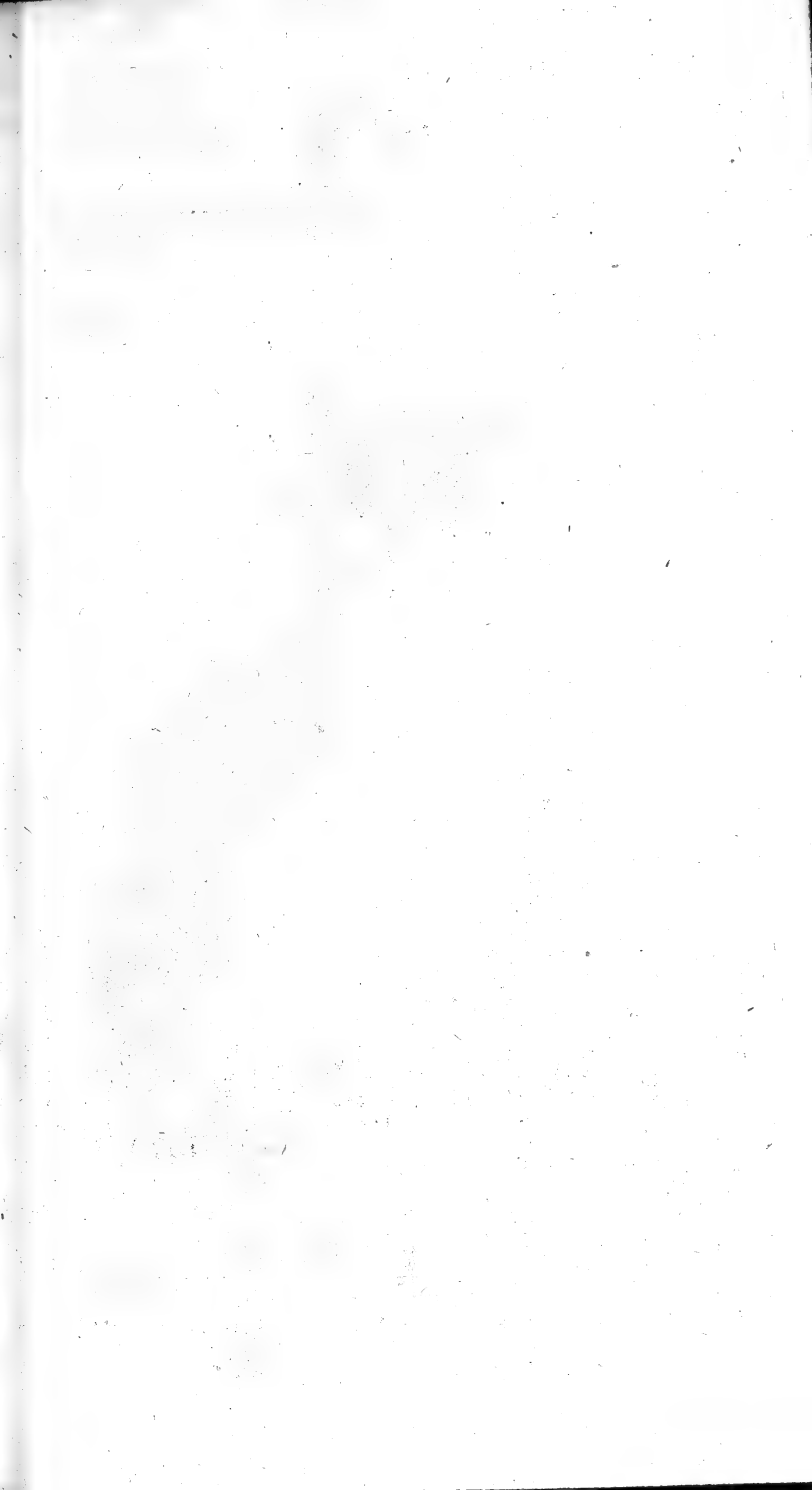
The Kestrel is another. It builds in the hollow of trees, the holes of high rocks, or in old towers and ruins. We often see it high in the air, suspended, and almost without motion. All this time it is watching for its prey, and frequently darts down and takes up a little chicken, if it stray from the hen: and this all other Hawks and Kites will do when they can.

Fowlers sometimes use a Hawk, called the Hobby, when they go out to take Larks. When the Larks see the Hobby they lie close to the ground through fear, and the Fowler draws his net over them.

There is a Falcon in America, called the Suf-flator. When he is angry or affrighted he puffs up his head until it appears as large as his body.

Some of the Falcons not only eat hares, and rabbits, and small birds, but they feed upon lizards, and worms, and insects.

GENUS



ORDER 1
Genus 3 Strix?



HORNED OWL.

GENUS 3.

S T R I X.

T H E O W L

Has a strong hooked Bill, without a cere, but covered at the bottom near the nostrils with setaceous feathers, (that is, feathers that grow smaller towards the end,) and which fall backwards. The nostrils are oblong.

The head, eyes, and ears are large, and the tongue bifid; the outward toe can be turned backward, and do the office of a hind toe. The claws are hooked and sharp.

OWLS, like Cats, can see with very little light; the pupils of their eyes, though they grow less in the light, are still round; but the pupils of the eyes of cats are always of the same length, and only grow narrower in the light.

Owls have a very quick hearing, and can move both the mandibles of their bills. They sail through the air rather than fly, their motion is so easy and so silent. They enjoy themselves most in moonlight nights; it is then they catch in greatest abundance their prey, which is moles, and mice, and moths, and insects of several kinds; for though the bright light of the sun dazzle their eyes, yet they require a little light; and when the moon does not shine, they seek

their

their prey in the twilight of the evening and in the morning.

In the middle of the day they are quite overpowered with the light. The little birds do not like the owl, because in the evening he flies after them, and would kill and eat them if he could. When they discover the place where he is in the day, they get together in great numbers, and fly about him and teize him; for they are not afraid of him then, when he is sleepy, and cannot bear the glare of the light.

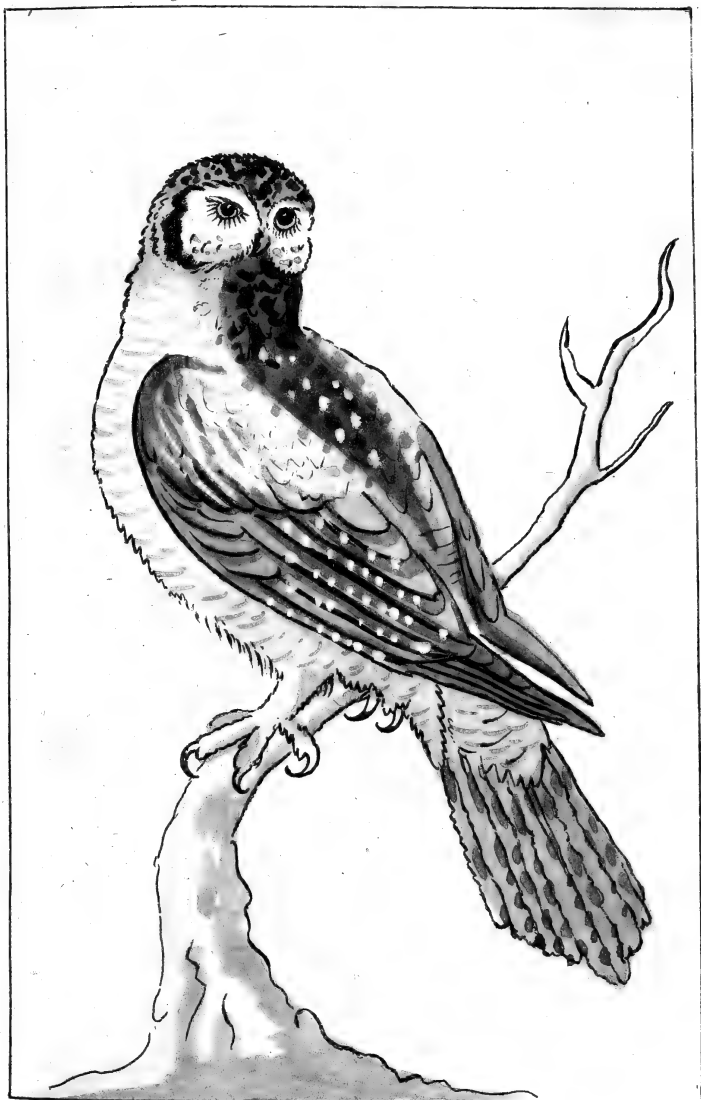
There are two divisions of Owls; one is called the Eared or Horned Owls; because they have feathers on each side of their head, which stand up like ears.

The other division is called the Owls with smooth heads: but they have both large circles of feathers, which grow round the eyes.

Owls eat frogs, and mice, and lizards, and moles, which they skin with great skill. They sometimes eat young pigeons and little birds; but though they swallow, they cannot digest the feathers, which remain a little time in their stomachs, and collect there in the form of balls. From time to time they throw up these little round balls, and a great number of them are found in the hollow trees, where they roost.

There

ORDER 1
Genus 3 Strix.



OWL *with smooth head.*



There are several kinds of Owls; one kind is called the Tawney Owl. It is very large, and is found in Syria, which is in Turkey in Asia. It will destroy little lambs, and little children too, when it can find them.

There is a brown Owl which kills hares, and rabbits, and moles, and skins them very curiously. This kind of Owl lives in England, and other parts of Europe.

In England too we find two or three kinds of Owls with ears, and several kinds of those that have smooth heads.

The Eagle Owl, or great Horned Owl, is as large as a goose. The common White Owls frequently roost in barns, and the farmers are very fond of them, because they kill the rats and mice that would eat their corn.

There is a very large kind of Owl at Hudson's Bay, which is as white as snow. Hudson's Bay is in North America.

No bird flies so smoothly as the Owl. In the dusk of the evening he skims silently near the ground, backwards and forwards, by the sides of the hedges, in search of mice, and frogs, and moles.

The great Horned Owl is sometimes used to decoy the Kite. They tie to his leg a fox's tail, that he may make a strange appearance. He is

B

then

then suffered to fly, and in that trim he sails slowly along, flying very low, as all Owls do.

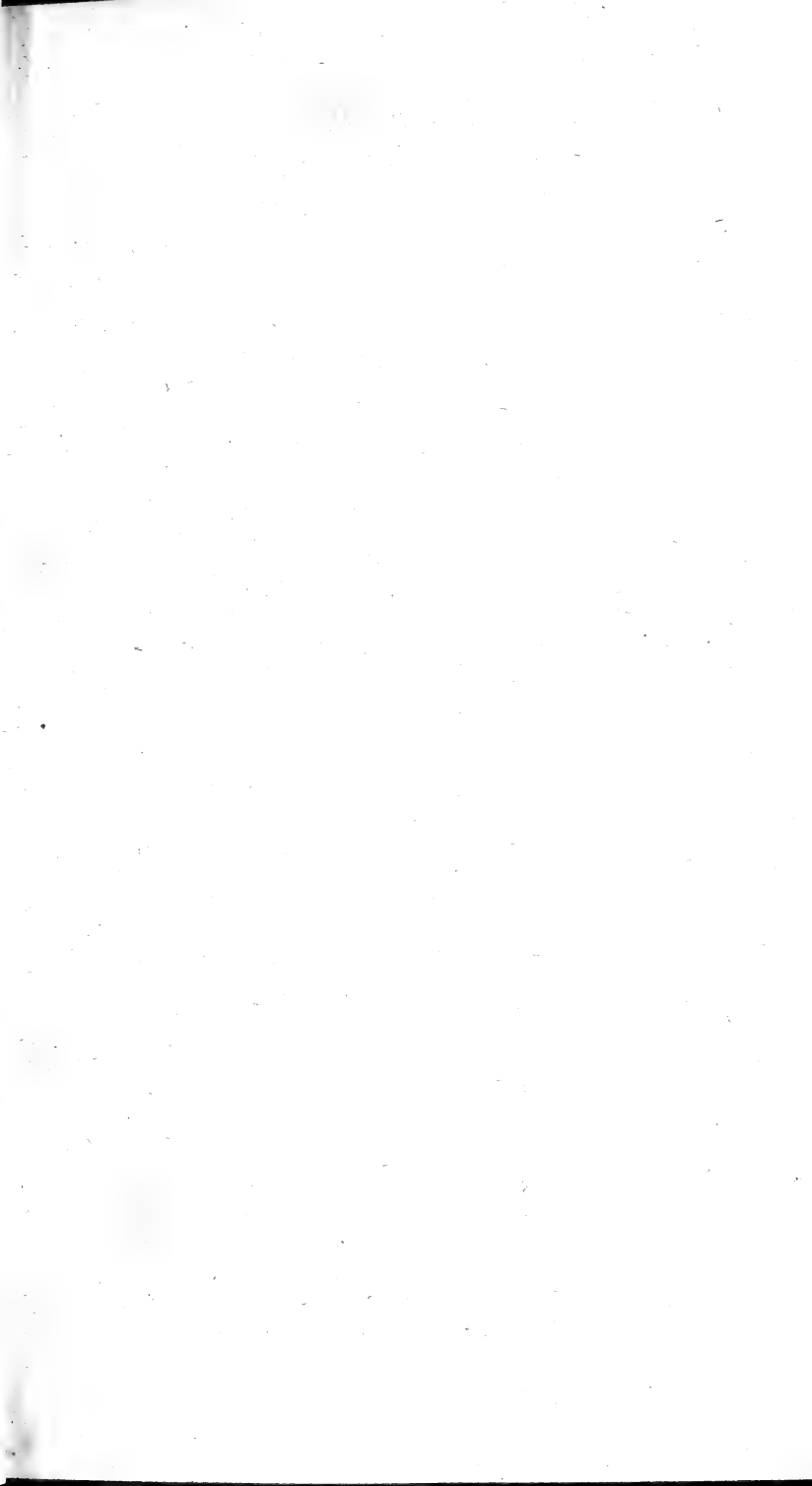
The Kite sees him from above, and flies after him, thinking perhaps that he may be proper food, and so comes cautiously nearer and nearer; then the falconer lets a strong hawk fly after the Kite, and catches him.

The great Horned Owl builds its nest sometimes in an old hollow tree, but more frequently in caverns of rocks, or in the holes of high and old walls. Its nest is three feet across, lined with leaves, and the Owl lays from one to three eggs. The Horned Owl seldom is at the trouble of making a nest, but generally uses the old nest of a Magpye.

When he is attacked by other birds, he defends himself very well with his beak and his claws, and if the bird be stronger than himself he lies down on his back, and fights with his beak and his claws.

There is another kind of Owl, called the little Horned Owl. These, like the Swallows, assemble together in Autumn to pass into other climates.

And there is an American owl, which burrows like a rabbit, and lays its eggs in a hole under ground.



ORDER 1
Genus 4 Lanius.



BUTCHER BIRD.

GENUS 4. L A N I U S.

THE BUTCHER BIRD, OR SHRIKE.

The Butcher Bird's beak is not very crooked; it has a kind of process, or tooth, on each side, near the point, and is naked at the base.

The tongue is jagged at the end.

The outmost toe is closely joined to the middle toe, as far as the first joint.

THE Butcher Birds are much smaller than the Kite; but they are very fierce: for they will attack birds four times as large as themselves.

They seize the birds, that they prey upon, by the throat, and strangle them; then they fix them upon thorns, and pull them to pieces, because their talons are too weak to hold the birds whilst they tear them with their beaks.

All the young ones live together, the first year, with their parents.

Their manner of flying is generally up and down, and not straight forwards, or sideways.

Besides birds, they sometimes feed on insects.

Several kinds of Butcher Birds live in England, and in other parts of Europe.

One kind has a crest upon its head, and is found in Bengal, which is in the East-Indies, (the East-Indies are in Asia.)

There is a crested Butcher Bird found in America.

One kind of the Butcher Bird watches the Hawks, and alarms the little birds when they are coming.

All the birds of which we have been reading; first, the Vulture; then the Falco, of which kind are the Eagles, Falcons, Hawks, and Kites; thirdly, the Owl kind; and fourthly, the Butcher Bird—they all belong to the order of the Accipitres, because their beaks are hooked, the upper mandible is armed on each side with a kind of tooth; the nostrils are wide.

Their feet are formed for resting upon, short and strong. Under their toes they have warty knobs. Their claws are hooked, and very sharp. The body, head, and neck muscular; their skin tough. They are not proper for food. They live upon prey and carcases. In general they build their nests high, and lay about four eggs. The female is the most beautiful and courageous. They pair.

As these birds live upon prey only, or animal food, we see how kind Providence has been, in giving them very good eyes to see their prey at a distance; and strong bills, and strong talons, to pull it in pieces; and they can fly very swiftly to overtake it.

If there were no Vultures in hot countries, the dead bodies, and the inside of cows and sheep, which are thrown away, would soon become very offensive, and occasion many disorders among the inhabitants; besides, they eat the Serpents and Crocodile's eggs, and prevent them from increasing too fast.

In Palestine, or the Holy Land, which is in Turkey in Asia, they would be overrun with Rats and Mice, if the Vultures did not destroy them.

If there were no Eagles, nor Falcons, nor Hawks, nor Kites, perhaps the little birds which they prey upon, would increase so fast, that there might not be food enough for them, and then almost all of these little birds must be half famished. It is better for them that a few should be killed by birds of prey, than that all should pine away and die of hunger.

Almost all birds of prey lay very few eggs, and have very few young ones. Providence has prevented their increasing very fast, for if they did, they would soon destroy all the little birds, and at last die of hunger themselves.

The Owls are very useful to us in killing Mice and Rats, that would destroy our corn, and Moles that get into the fields, and would throw out the corn by its roots.

God is very wise, and very good; for every creature he has made was made for some good purpose; and he has given to each the power of taking care for itself.

O R D E R II. PICÆ.

GENUS 5. PSITTACUS.

P A R R O T S

Have hooked beaks, the upper mandible is moveable, and furnished with a cere in some species.

The tongue is fleshy and obtuse (that is blunt); and not divided. The head is large, and the crown flat.

Two of its toes are placed before, and two behind; and its legs are short.

THE situation of the toes in the Parrots, two being placed before, and two behind, makes them very useful in climbing trees; and they have the power of turning one of the hind toes before, which they do when they take any thing in their claws to eat, standing all that time on the other foot.

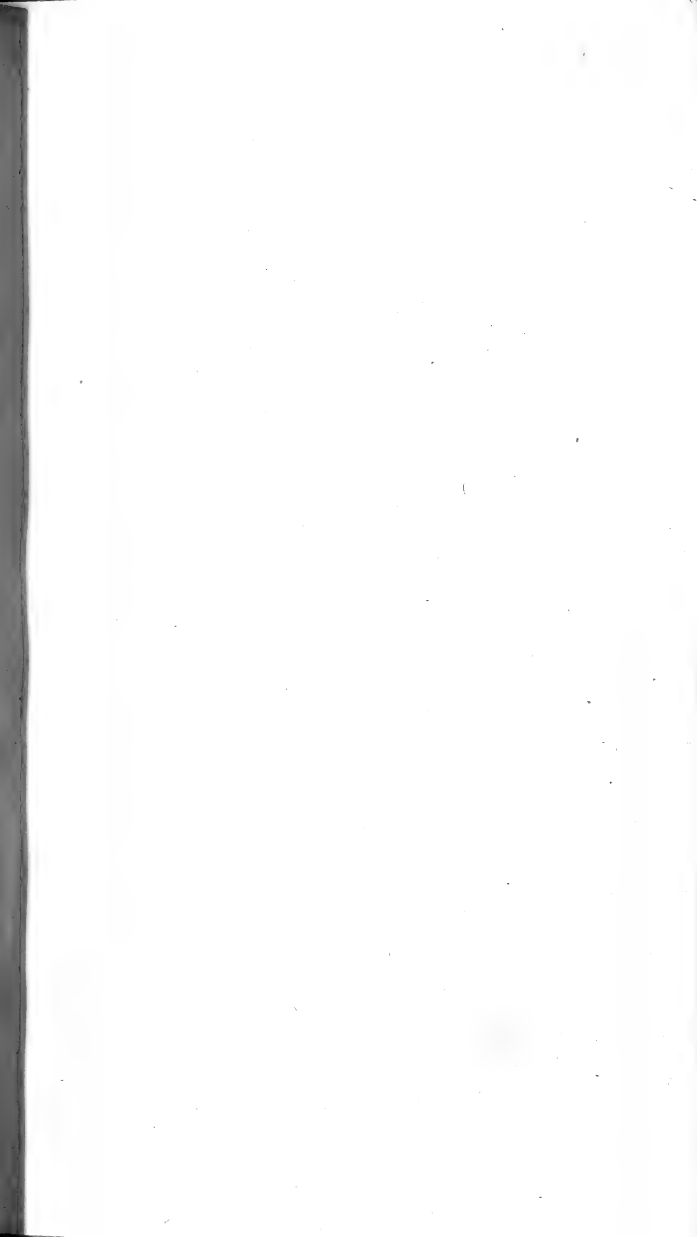
As Parrots cannot hop from tree to tree, they use both their beaks and their claws in climbing;
first

ORDER 2
Genus 5 Pittacus.



PARROT.





ORDER 2
Genus 5 Psittacus.



COCKATOO.

first taking hold of the branch above them with their beak, and afterwards they grasp it with their claws, and so raise up their bodies. They use their beak too as a kind of third foot; for, as they descend from their perches, they often rest part of their weight upon it, before they remove either of their feet.

There are several kinds of Parrots: the Cockatoo is a beautiful bird of the Parrot kind; his feathers are white, and his beak very round and crooked: he has a crest of long feathers on his head, which he can raise or lower when he pleases.

In Ternate, (which is one of the Molucca islands,) and in other parts of the East Indies, the Cockatoos build their nests on the tops of houses.

The Cockatoo may be taught to speak, but not so plainly as many other kinds of Parrots.

There is another kind of Parrot, without any crest, having a short tail. The Grey Parrot from Guinea is one of these. It is easily taught to speak, when young, and will readily imitate the tone of a voice that is harsh.

A lady in France had a Parrot that was very fond of the cook-maid, and would follow her about the house, and express the greatest satisfac-

tion, and fondness, when he had climbed upon her shoulder.

The maïd had once a swelled finger, which gave her great pain. All the time she was ill, the Parrot would not leave her chamber, but seemed very unhappy; especially when her pain was so violent as to make her complain.

Scaliger speaks of a Parrot who had learnt to imitate the Savoyards' dance, and to repeat their song. The Savoyards live near the Alps.

The Parrot eats almost any thing, when he is kept tame; but meat, which he is fond of, is very hurtful to him; it brings on a disorder, which makes him gnaw and pull out his feathers.

There is a great variety of Parrots in Brazil, in South America; and the people there spend much of their time in teaching them to talk. They have the art of improving the colours of Parrots: when they are young, it is said that they pull out some of the feathers, and drop upon the part the blood of a beautiful Frog, which is found in Brazil. This Frog is of a fine blue colour, with lines of gold; and the new feathers of the Parrot, which would have been green, by these means, become yellow or red.

But it is very cruel, even in Savages, to do so.

They

The natives catch the young Parrots by cutting down the trees in which the nests are built; and they shoot the old ones with blunt arrows, or pieces of stick, covered with cotton, which beats down the Parrot, but does not always kill it. Sometimes they make a fire under the trees where the Parrots are, and throw upon it gum, and green pimento, (a kind of spice,) which produce a smoke that stupifies the Parrots, and they drop from the tree.

Some of the smaller Parrots are very nice food. In South America, on the banks of the river of Amazons (which is the largest river in the world,) the Indians kill Parrots and Monkies with little arrows; the points of these arrows have been dipped in the juice of a poisonous plant, and they blow them through a hollow piece of cane.

Parrots live generally upon the fruit and seeds of trees. They are very fond of the seeds of the cotton-tree, but that soon intoxicates them. When they eat the seeds of spice-trees, their flesh tastes like cloves and cinnamon.

They generally build their nests in the holes of hollow trees; especially those which have been made and forsaken by Woodpeckers. It is said, that in Africa, several kinds of Parrots fix their nests at the end of the slender twigs of a tree, for

fear of the Monkies. When they are kept tame, they are subject to fits; they sometimes fall down suddenly, and lie for a little while as though they were dead.

Parrots are in such numbers at Bengal, (which is in Asia,) and on the coast of Africa, that the Indians and Negroes are obliged to watch their fields about the time that their maize, (or Indian corn) and their rice is ripening, to prevent the Parrots from destroying their harvest.

There is a kind of Parrot called the Paroquet.

Some Paroquets have short tails, like the Cockatoo and Grey Parrot; and others have long tails, which end in a point.

Paroquets generally fly in flocks; they are green, like the leaves of the trees, and fowlers find it very difficult to see them. When a Paroquet discovers a tree which bears the berries that he likes, he makes a loud cry, to inform the rest, who immediately follow; and then the fowler shoots in among the flock and kills many of them.

The Maccaws are the largest of the Parrot kind: their colours, in general, are very beautiful, and their tails very long. They frequent the moist lands which are planted with palm-trees. They generally fly in pairs, and perch on the

ORDER 2
Genus 5 Pittacus.

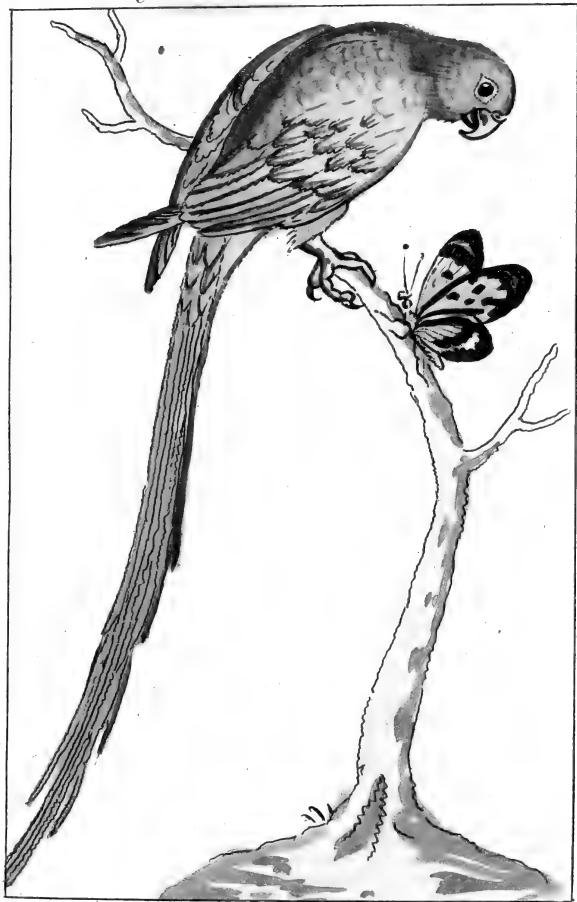


PAROQUET.



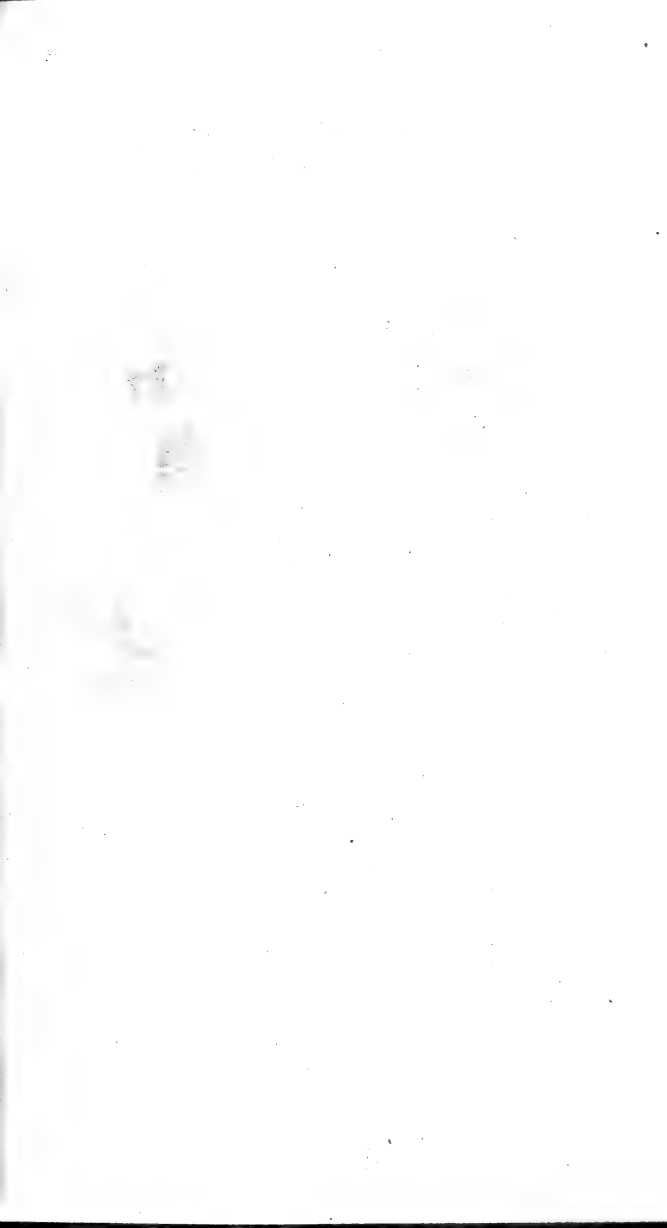
ORDER 2

Genus 5 Pittacus.



LONGTAILED PAROQUET.





ORDER 2
Genus 5 Psittacus.



M A C A O.

the tops of trees ; they line their nests with feathers, and lay two eggs. They have young ones twice a year ; and the little Maccaws have often two small worms in their nostrils, which die of themselves.

The Savages of the Antilles, (which are islands in the Atlantic Ocean, near America,) watch the moment when they are eating the fruit which has fallen from the trees, and on a sudden they shout and clap their hands, and make a very loud noise ; the Maccaws, terrified, forget the use of their wings, and suffer themselves to be taken. The Indians wear their feathers in their ears, and in their caps, and sometimes in their noses.

If a small quantity of parsley be given to a Maccaw, it occasions a thick matter, like glue, to run from his beak, and he dies in an hour or two afterwards.

GENUS 6. RAMPHASTOS.

THE TOUCAN.

The Toucan's beak is very large, hollow, convex, and toothed like a saw on the edge, but irregularly.

The nostrils are behind the base of the beak.

The tongue is fringed like a feather.

In most, two of its toes are placed before and two behind, for climbing.

ONE kind of the Toucans is about the size of a Magpie, the head is very large, in order to support its bill; though the bill is very light, and not much thicker than parchment.

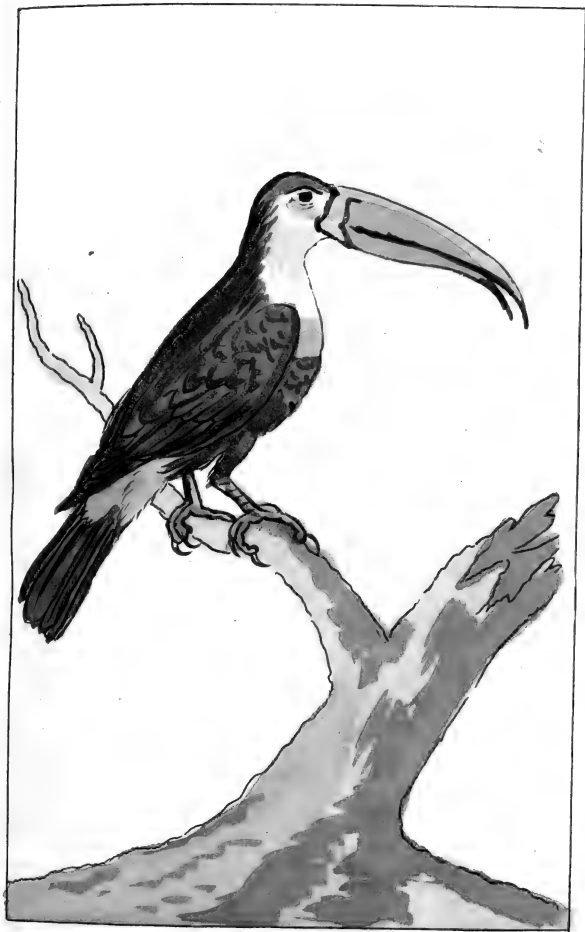
Between the head and the bill is a black line, and there the nostrils are placed; but they are so covered with feathers, that some have thought that the Toucans breathed through their beaks, and had no nostrils at all.

It lives chiefly upon the pimento, which it is very fond of, and it will eat fruit.

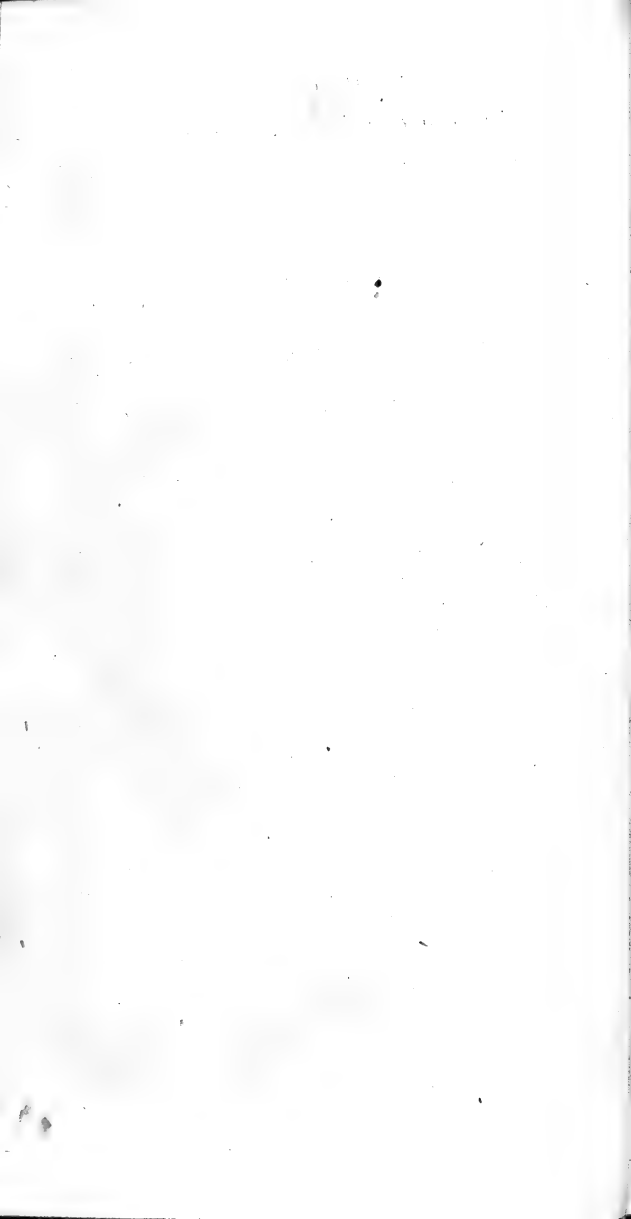
A Toucan was brought up tame; it was fed in the same manner as a Parrot; grapes were its favourite food; if they were pulled off the bunch and thrown into the air, it would catch them before they reached the ground.

ORDER 2

Genus 6 Ramphastos.



TOUCAN.



It is an American bird, and builds its nest in the holes of trees, and sits with its bill at the entrance, ready to peck at and drive away the Monkeys, who often come in order to kill and eat the young ones.

The Indians take the feathers from their breasts, and wear them on their cheeks on account of their beautiful colours.

The Toucans make a kind of whistling noise.

They frequent moist places where the palm-trees grow, on account of their fruit, upon which they feed.

They fly in little flocks of six to ten, and though they fly awkwardly, (on account of their large beak and small wings) they generally perch upon the tops of high trees.

They lay but two eggs, and are easily brought up tame. They swallow whole every thing that is given them, their beaks being too slight to break any thing. Their manner of feeding is to take their food with the point of the beak, and throw it up in the air, and to receive it into their throats as it is falling, their swallow being very wide.

They cannot bear cold, and even in warm climates, when they have been tamed, they make for themselves a bed of leaves, or of straw, or of
any

any thing they can get, to keep themselves warm in the night.

The legs of the Toucan are short, so that they can not well walk, but are obliged to hop.

GENUS 7. BUCEROS.

THE INDIAN RAVEN, OR
HORN BILL, OR CALAO.

The beak is convex, bending, with sharp edges, like that of the Crow; large, and toothed like a saw, or rather jagged at the edges

The skull naked towards the forehead, with a large gibbosity (or lump) rising upon it, and extending along part of the beak.

The nostrils are behind the base of the beak.

The tongue is pointed and short, and

The feet like the King Fisher's (that is to say)

The outward toe is united to the middle toe as far as the third joint. The legs are scaly.

THE beak of the Buceros (or Calao) is so tender, that it breaks at the edges very easily; and the upper and lower mandible only meet at the point.

They are found some in Africa, and some in Asia.

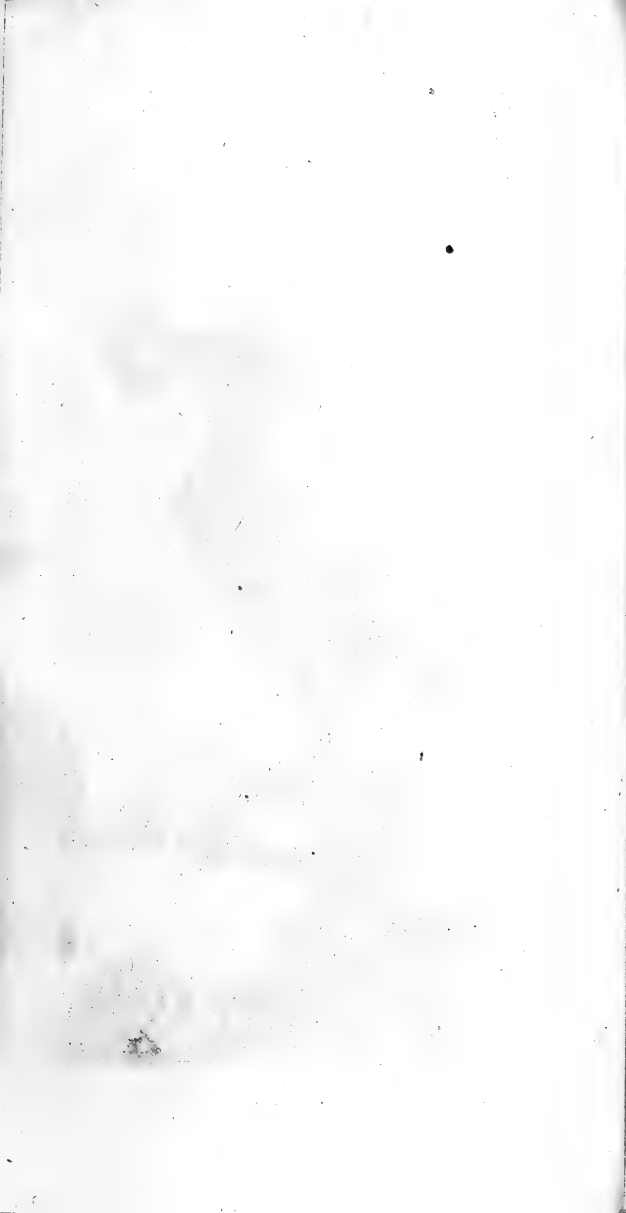
The

ORDER 2

Genus 7. Bucceros.



INDIAN RAVEN.



The false or upper beak is not solid, in that case it would be too heavy; but it is formed of a light, spongy substance, like the cells of a honey-comb.

The Calaos (or Indian Ravens) which live in China, feed sometimes on carcases, and, like the Vulture, they follow the hunters.

Some kinds of the Buceros feed upon frogs and lizards, and one kind has two horns.

One kind of the Calao has no knob or prominence on its beak, but it is very large, and in the form of a scythe. In the beak of the Calao of Manilla there is a slight eminence. It is larger in the Calao of the island of Panay, still more considerable in the Calao of Malabar on the western coast of India, and monstrous in the Calao Rhinoceros.

A Calao from Malabar was kept at Paris in a garden nearly a whole summer; he was fed upon fruit and lettuces, but he would eat flesh and rats, and once he devoured a bird.

The Calao Rhinoceros hunts rats, and feeds upon them; and for this reason he is brought up tame in the East-Indies.

The legs of all the Calaos are so short, that they walk very awkwardly.

GENUS 8. B U P H A G A.

THE BEEF-EATER.

The beak is straight, and rather four-sided; each mandible is enlarged at the end. Its feet are formed for walking or hopping; that is, it has three toes before and one behind. The twelve feathers of its tail are rather pointed.

THE colour of the body is a brownish grey. It is found in Senegal, in Africa, and feeds upon the larvæ of flies, that is, upon the little maggots that become flies: in order to procure them it perches on the backs of Cows, and pierces their skin with its beak, and thus takes away the larvæ, which were produced from the eggs that the flies had laid there.

There are some flies which have a little piercer in the tail part of the body, and they make holes with it into the skin of cattle, and so lay their eggs there.

GENUS 9. CROTOPHAGA.

THE ANI.

The beak is compressed, thin, but deep; a little oval; arched, and with a keel on the top; the upper mandible bowed, and the lower straight. The Nostrils round. Tongue flat, and pointed at the end.

Toes two before and two behind, for climbing.

Ten feathers in the tail.

THEY live in Africa and America, and fifty of them often build together a very large nest. Their food is grasshoppers, and the ticks which infest cattle. The oxen suffer them quietly to pick the ticks from their skins, which, but for these birds, would increase so fast as to be quite troublesome.

The Crotophagæ, or Anis, fly in little flocks. They cover their eggs with leaves, and whilst some are sitting, others are enlarging the nest. Sometimes they separate their eggs by little partitions.

If one sees a cat or any other animal that would hurt them, he informs the rest by a very shrill cry.

GENUS 10. C O R V U S.

T H E R A V E N.

In the Corvi, the beak is strong, convex, and sharp at the edges; it is covered at the base with setaceous feathers, (or feathers like bristles.)

The tongue is cartilaginous, or gristly, and divided.

The outmost toe closely connected with the middle toe as far as the first joint, and the feet formed for hopping or walking, or three toes forward and one backward.

TH E R E are many birds of the Corvus genus, viz. Ravens, Carrion Crows, Rooks, Ruyton Crows, Jackdaws, Jays, Magpies, Nutcrackers, Cornish Choughs, &c.

C O R A X. T H E R A V E N.

Ravens are found in England, and almost in every climate in the world.

They fly in pairs, and will destroy other birds if they can take them unawares.

Sometimes Ravens are grey, and sometimes white, but this is not very common.

A Raven may be taught to catch birds like a Hawk, to fetch and carry like a Spaniel, and to speak like a Parrot; and some have been taught to sing like a man. When Ravens are tamed they become very great thieves, for they not only take any thing which they may want to eat, but they are
very

ORDER 2

Genus 10 Corvus.



RAVEN.



very apt to fly away with any glittering things they can find, as money, rings, or tea spoons.

The Raven can smell to a very great distance. He is fond of carrion or dead carcases; but if he cannot get them, he will feed on fruit, or insects, or almost any thing that he finds.

They generally build their nests in trees, and lay five or six eggs. Sometimes they build in old towers. They generally use the same nest, only repair it every year.

They do not like that any other birds should live near them, and they even drive away their young, as soon as they can provide for themselves.

In three of the Hebrides (which are islands on the western coast of Scotland) there was a pair of Ravens in each, and they had driven away all other birds from those islands.

Ravens are very cruel, for besides killing little birds, they frequently pick out the eyes of sheep and lambs when they find them sick or helpless.

Ravens live a long time, very frequently one hundred years.

In Egypt Ravens are much regarded, because (like the Vulture) they assist in devouring the carcases, which, if suffered to lie, would smell very disagreeably.

Though Ravens be black, yet in some situations the black seems tinged with a beautiful blue.

When

When the weather is clear, they frequently amuse themselves by flying to a very great height.

When they have hatched their young, they feed them (as the Pigeons feed their little ones) with food which they have prepared in their own stomachs.

They are very fond of cherries, which they swallow whole, and after some little time they throw up the stones and the stems.

Ravens walk when they are upon the ground, but do not hop. Sometimes, during storms, they are seen flying through the air, their beaks seemingly pointed with fire, it may be the lightning from the clouds.

C O R O N E.

THE CARRION CROW.

THE Carrion Crow in the form of its body and manner of living, is like the Raven. It feeds on carrion, and sometimes on grain and insects, and will often pick out the eyes of young lambs. It lays five or six eggs, like the Raven; and like the Raven, it is sometimes found black and sometimes white.

In the summer Crows live in the woods, and destroy a great number of Partridges eggs, which they pierce very skilfully with their beaks to carry to their young.

In the winter they mix with the Rooks, and are often seen perching on the backs of Sheep and Pigs to eat the insects there.

When they pair, they do not, like Rooks, build near one another, but each pair has for itself a compass of near a mile.

They are sometimes taken by naughty boys, who twist pieces of paper in the form of cones, or sugar loaf papers. Towards the bottom they put a piece of meat, and spread bird-lime all round the inside of the cone near the edge. They then make little holes in the ground, and place these papers with the point downwards. The Crows fly down when they smell the meat, and put their beaks into the paper to take it out; the bird-lime sticks the cone to the feathers round their necks, so that it covers their eyes: and the poor crows, not being able to see, fly about, some straight up very high, others against trees and buildings, where they hurt themselves. Little boys do not perhaps consider this, for we would hope they could not intend to be so cruel.

Crows feed upon insects, worms, grain, and fruits; they break nuts by letting them fall out of their beaks from a great height upon a stone, and then pick up the kernel.

FRUGILEUS.

THE ROOK.

ROOKS are gregarious, (that is, they live together in numbers.) They very much resemble Crows, but the bill of the Rook is generally bare of feathers as far as the eyes, because it is frequently thrust into the ground to pick out grubs and earth-worms. Its feathers are more glossy than the Crow's, and it is a much more innocent bird, for it lives mostly on grain and insects.

Rooks build in woods and forests, and frequently in groves near houses.

When once a certain number have agreed to live together, they do not suffer any strange Rooks to come amongst them. Early in the spring they meet together in their grove which they had forsaken in the winter, having left only five or six of their company, perhaps to prevent others from coming there.

They then keep together in pairs. The old Rooks, who built there last year, go to their old nests, which only want a little mending; but the young ones of the last year have to fix upon a proper situation, about which they are very nice;

nice; for some branches are too weak, and some are not forked enough, and some perhaps may be too near another nest; for the old Rooks will not allow themselves to be disturbed by the younger ones. The young Rooks to save themselves trouble, will frequently watch their opportunities to steal sticks from another nest; but as soon as they are discovered, a number of Rooks assemble, and pull to pieces all the nest they have been building; then they have to begin the whole again: so they lose much time, and have much trouble, which they would have saved if they had not stolen from others.

Whilst one of the Rooks is gone to get the sticks and roots of grass to make the nest, the other sits upon the tree to guard it; and if they be very industrious, the nest is finished in three or four days.

Rooks live very much upon worms and insects, and frequently turn over with their beaks the stones which lie upon the ground in search of them.

They lay four or five eggs; and whilst their young are unfledged, they feed them with the food which they have swallowed, as the Pigeon does.

CORNIX.

C O R N I X.

THE ROYSTON CROW

IS very much like a Rook. It lives in Europe, but in England it is only a bird of passage.

It comes in the winter, and leaves us when the Woodcocks go away. It breeds in Sweden, and builds in trees. It breeds too in Germany, on the banks of the river Danube.

When the Royston Crows are on the sea-coast, they eat crabs and shell-fish, but at other times they feed upon grain, caterpillars, insects, and carrion. The head, and back, and wings of this bird are black, glossed over with a beautiful shining blue.

M O N E D U L A.

THE JACKDAW

BUILDS in steeples, old ruins, and high rocks, and lays five or six eggs; his head is large for the size of his body. Jackdaws fly together in flocks: and feed on insects, on grain, and on seeds. The back part of his head, his breast,

breast, and stomach, are ash-coloured; and all the rest of his body is black, glossed with blue. Sometimes the Jackdaw is kept tame in a cage, and taught to speak.

G L A N D A R I U S.

T H E J A Y.

THE Jay is a most beautiful bird. Its wings are barred, or striped, with black and blue; the neck, back, breast, and stomach, are of a faint purple colour, mixed with grey.

The young follow their parents until spring. In the summer they eat peas and cherries in the garden; and in autumn they live upon acorns, and sometimes they kill small birds.

Their natural note is very disagreeable; but they are easily taught to speak.

The forehead of the Jay is white, with black streaks; and his head is covered with long black feathers, which he can raise when he chuses, and then they form a crest.

The Jay is a very silly, and passionate bird; and sometimes in his anger, entangles himself between two branches and so dies.

When the Jay perceives a Fox, he cries out, and a great number of Jays immediately come to him, and endeavour to frighten the Fox with their noise.

Like the Rook and the Magpie, he hoards that food which he does not immediately want to eat, and sometimes forgets where he has left it. The nuts that he has buried in this manner begin to grow in the spring.

There is one kind of Jay that has red eyes, and its feathers are almost white.

P I C A.

T H E M A G P I E.

THE Magpie's bill is very much like the Butcher Bird's, for it has a sharp process (or notch) near the end of the upper mandible. He lives upon worms, and insects, and small birds, and carrion. If he meet with a lark that is wounded, or a Chicken at a distance from the Hen, he is sure to kill and eat them.

Magpies frequently perch upon the back of cows and sheep, and eat any little insects that breed there. They seek for the nests of little birds, and very often suck their eggs.

There

There is scarcely any thing which Magpies do not eat; and they are very careful too, for when they have had enough they endeavour to hide what is left for another time.

The Magpie is very ingenious in building his nest: it is made first of small twigs of hawthorn, and the thorns stick outwards, they are fastened together with roots of grass; it is then lined with grass and wool, and plastered within with mud. The nest is very large: and as it may easily be seen, and the Kites and Hawks would be very apt to take away its young, it is (perhaps for that reason) quite covered on the top with thorns: these thorns are curiously fastened together, so that only one little hole is left for the Magpie to get in at.

The Magpie's head, and throat, and back, and tail, are of a beautiful black, glossed with green, and blue, and purple; his breast, and part of his wings, are white; and his tail is very long.

There are very beautiful Magpies in Italy and China, but they are not quite like this that is found in England.

The Magpie is easily made tame. Mr. Buffon knew one that passed both the day and the night with a number of cats, and made them all afraid of him.

It very soon learns to talk, and to imitate the voice of other animals. I have read of one that could counterfeit the cry of a calf, of a kid, and a sheep, and even the pipe of a shepherd; another that could repeat a flourish of trumpets.

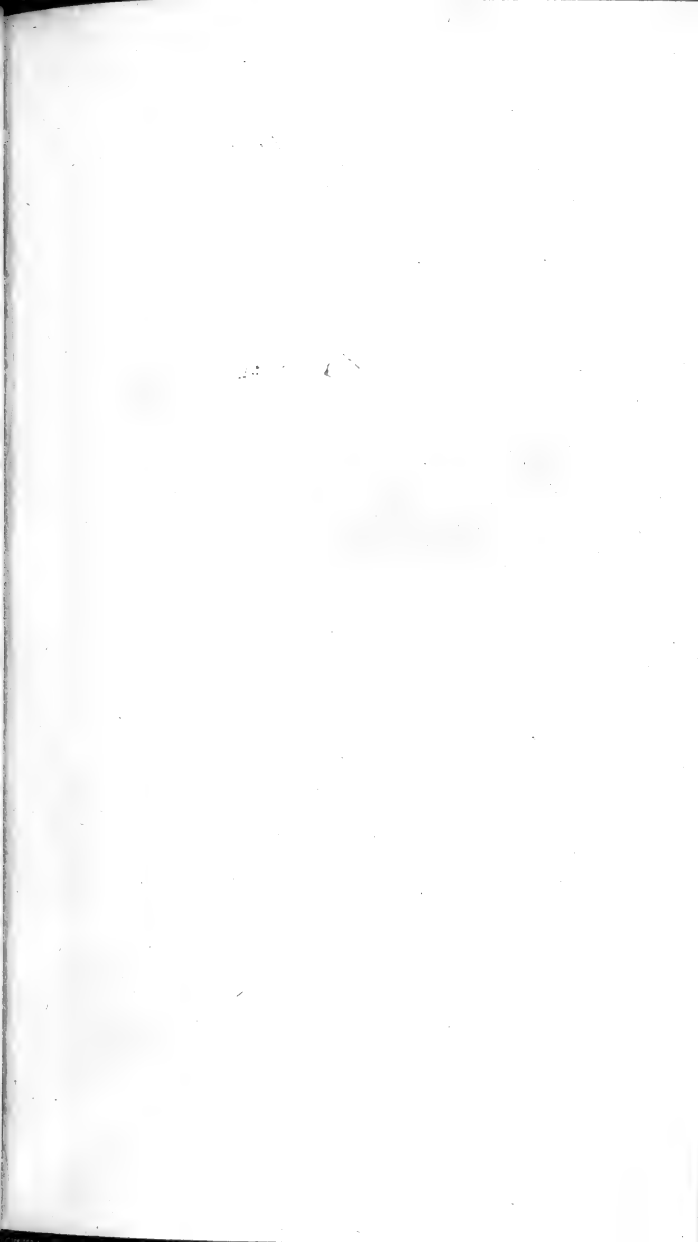
Plutarch (who has written the lives of many of the great men of Greece and of Rome) says, that a Magpie, who was very fond of learning to imitate almost every thing, having heard a flourish of trumpets, became silent all on a sudden. This very much surprised those who were used to hear him almost always talk; but they were still more surprised soon after, when he imitated, very exactly, the sound which the trumpets had made, with all the notes and changes.

The Magpie is a very restless bird; when it is on the ground it is continually hopping about, and moving its tail.

No bird is more attentive to its young, for if any bird of prey flies near its nest, the Magpie attacks him with great courage, and drives him away.

The Magpie lays seven or eight eggs, and only once a year, unless it be deprived of them, then it will lay a second time, but fewer eggs; and if it be then robbed, it will lay a third time, but not so many eggs as before.

CARYO-



ORDER 2

Genus 10 Caryocatactes.



NUTCRACKER.

CARYOCATACTES.

THE NUTCRACKER,

IS found mostly in mountainous countries, and lives upon nuts, acorns, wild berries, and pine kernels, and on insects.

There are two kinds—one of them breaks the nuts, the other makes a hole in them.

They both hoard their food, like Jays and Magpies.

Their plumage is very remarkable, from the white triangular spots every where but on the head.

They are found in Savoy, in Switzerland, and in Austria; especially upon those mountains which are covered with firs.

A great flight of Nutcrackers came one year into France, so tired, that they suffered themselves to be beat down with sticks, and to be caught by the hand.

They bore holes in trees like Woodpeckers: they make their nests there, and some of the feathers in the middle of their tails are very much worn, as if they used them to help their climbing upon the sides of trees.

G R A C U L U S.

THE CORNISH CHOUGH,

HAS a crooked bill, red and long; its legs are red, and the rest of the body black. It frequents rocks, castles, and ruins by the sea side. Its voice is like that of the Jackdaw: it is often kept in gardens to destroy worms and insects. It is found in Cornwall, and in the mountains of Switzerland.

GENUS II. CORRACIAS.

THE R O L L E R.

His beak is cultrated, or sharp at the edges, like the Crow's; crooked at the point, and without feathers at the base. Nostrils narrow and naked.

The tongue is cartilaginous, (or griffly,) and bifid, (that is, divided at the end.)

The feet formed for walking or hopping, the toes being placed three before and one behind.

THERE are many kinds of Rollers: some live in Europe, and feed upon beetles, frogs, acorns, and grain.

Some

Some live in Asia, and some in Africa. Their feathers are beautiful shades of blue, and green, and white.

They generally build their nests in birch-trees; but in those countries where there are none of these trees, as in the island of Malta, and Africa, they are said to make their nests in the ground.

GENUS 12. O R I O L U S.

T H E O R I O L E.

The bill is conic, convex, very sharp, and strait; the upper mandible slightly margined, and a little longer.

The tongue sharp and bifid.

The feet formed for walking or hopping, or three toes before and one behind.

THERE are a great many birds of this kind. They live in Europe, Asia, Africa, and America, but mostly in warm climates.

The Galbula, or Golden Thrush, which is one of them, lives on insects and berries, and makes a nest in the form of a pitcher or jug, of leaves, and at the end of the smaller branches of trees.

Some of these birds have a stripe, which reaches from one eye to the other, round the back part of the head.

The black and yellow Daw, another bird of this kind, which lives in South America, builds a nest in the form of an alembic; which is made very curiously of hair and fibres, woven together.

This nest is hung at the end of a very small branch; and 400 of them have been seen on one tree.

The nest of the Baltimore is hung like a purse, from a forked branch of a tree.

The Banana sews his nest very curiously to the under part of a leaf of the banana-tree, which serves as a covering, and is at the same time a part of the nest. Its form is very singular, for it is like a quarter of an orange.

In the countries where they live there are a great many monkies and serpents; and they build their nests in this manner, at the end of a very small branch, that they may be secure from their attempts; for monkies and serpents are very fond of eating birds.

Albin says, that the Banana birds will sometimes join together to attack a larger bird; and after they have killed him, will devour him, every one eating in his turn without quarrelling.

The *Icterus Pterophoenicus*, or Red-winged Starlings, fly together in great flocks; and sometimes join with other birds, and destroy whole fields

fields of maize or Indian corn. They breed in Carolina and Virginia, always among rushes. They fasten together the tops of the rushes, as a canopy or covering to their nests, which they build under them, and at so just a height, as always to be above the flowing of the water.

GENUS 13. GRACULA.

THE GRAKLE.

The beak is convex and compressed; rather bare at the base. Nostrils small.

The tongue strait, pointed, and fleshy.

The feet formed for walking or hopping, three toes before and one behind.

THE Minos are birds of this kind; they come from the island of Borneo, and from other islands in Asia. They whistle, and talk, and sing, better than the Parrot. They are of a blackish and violet colour; and there is a piece of yellow skin behind their head which reaches on each side to the eye. The beak is red, and yellow at the point.

Another bird of this kind is found in the Philippine islands, in Asia. The sides of its head are

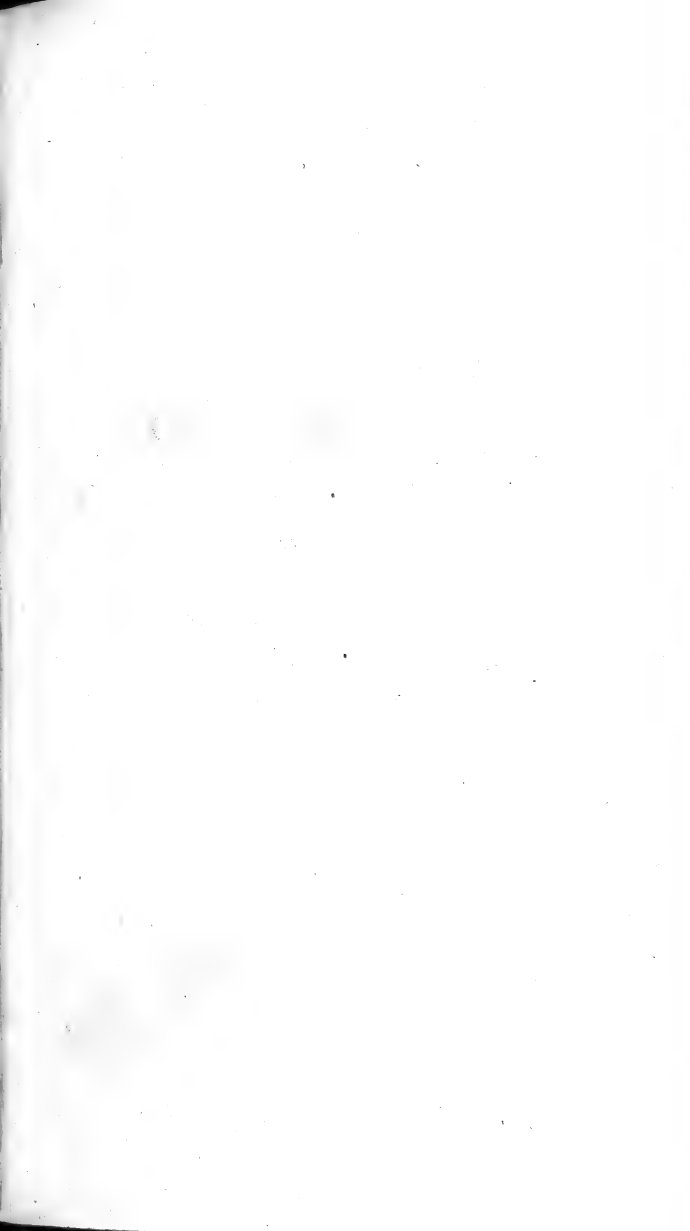
naked; and when it is angry, they appear very red. It has a black line of feathers on its head.

One that was kept in a cage swallowed a young rat whole, it first bruised the rat against the wires to make it soft.

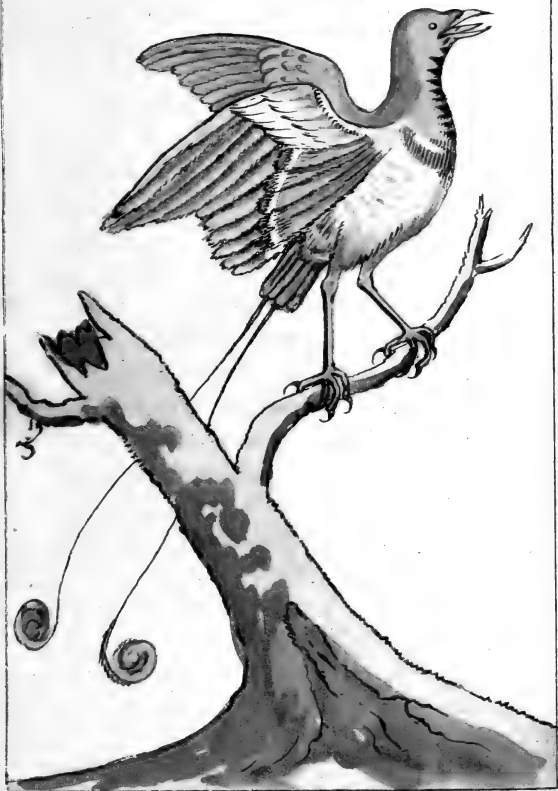
These birds are very fond of grasshoppers; a pair of them was sent for to the Isle of Bourbon near Africa, to eat the grasshoppers which were very troublesome; they increased very fast and killed all the grasshoppers, and now they are very troublesome themselves, for they eat the grapes and the dates and the corn, and fly into Pigeon-houses and kill the young Pigeons.

Some birds of this genus are found in America, and some in Egypt.

There is one that comes from China, called the Chinese Starling; its feathers are black, but its bill and legs are yellow; and a little tuft of feathers grows from the bottom of its bill.



ORDER 2
Genus 14 Paradisea.



BIRD of PARADISE.

GENUS 14. PARADISEA.

THE BIRD OF PARADISE.

The beak at its base, and the throat, are covered with soft feathers like velvet.

The feathers on the sides, which grow under the wings, are very long.

The two upper tail feathers naked and distinct.

Legs and feet very strong; three toes before and one behind.

THE greater Bird of Paradise is very beautiful; the tail, the breast and stomach are of a brown or chestnut colour; the throat is covered with green soft feathers like velvet; the feathers of the breast are of a dark blueish purple. They fly in flocks, and are brought from the Molucca Islands. The people there, when they catch these birds to send them to Europe, generally cut off their legs. This has made many who never saw them alive, imagine that they have no legs.

Birds of Paradise feed much upon Butterflies; like Swallows, they are almost always flying.

The King Bird of Paradise lives in the Spice Islands, in Asia. The bill is yellow, the upper mandible covered half way over with orange-coloured velvet-like feathers, and so is part of the

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head and throat; its tail is very short, and the wings reach beyond it; but from the upper part of the tail there are two stems of feathers about six inches long, naked, except towards the end, where they have webs on one side, and curl round. Its head and back are red; under each wing it has a remarkable tuft of seven or eight feathers tipped with green; and on its breast there is a crescent of feathers of a dark glossy green.

Birds of Paradise are so extremely light, from the great quantity of their feathers, that their flight is liable to be affected by the winds; on this account, perhaps, they chuse for their abode those countries in which high winds are not frequent.

GENUS 15. T R O G O N.

THE CURUCUI, OR COUROUCOU.

The beak is shorter than the head, compressed, hooked, and on the margin, or edge, a little waved, surrounded at the base with fringe-like feathers.

The toes placed two before and two behind, for climbing.

The legs are short and weak, and covered with feathers or down.

THEY are found in South America. One of this kind has a yellow bill, surrounded with stiff black feathers that point forward; they have

have black feathers round their eyes ; the throat, the top of the head, and back, is of a beautiful green, glossed with blue and gold ; the forepart of the neck a blue green ; the wings are ash-coloured ; the breast and stomach of a beautiful orange ; the six middle feathers of the tail are green, tipped with black ; the other feathers white, striped across with black, except at the top, where they are white.

Their note is melancholy. They retire into thick forests, and lay in hollow trees upon decayed wood, which they break very small with their bills. They lay three or four white eggs, and their nest is very soft. The male bird brings food to the female whilst she sits, and sings, perched on a neighbouring bough. They feed their young with worms, caterpillars, and insects.

Rats, and snakes, and birds of prey often devour them. They are about the size of a pigeon. They do not fly much, but sit on the same bough for the greatest part of the day. Their feathers easily fall off. They are beautiful. The Mexicans use them in making pictures and other ornaments, which are very pleasing.

GENUS 16.

B U C C O.

THE TAMATIA, OR BARBET.

The beak is cultrated; compressed at the sides, bent as the point, with a margin on each side.

The gape of the beak extending to below the eyes.

The nostrils covered with stiff reclining feathers.

The toes two before and two behind, for climbing.

TAMATIAS live in the most solitary parts of forests; they are never seen in flocks; their flight is heavy and short; they perch most on the bushiest trees, and remain upon them a long time without changing place; their head is large in proportion to the body, and the tail short. They often draw their heads inwards towards the shoulders, and seem rather melancholy. Their bodies are as broad as they are long. They feed mostly on insects, and are found both in Africa and America.

One of the Tamatias has a yellow stripe across the back.

The Tamatias are so indolent, that you may shoot at them more than once, before they will fly from the branch where they are perched.

GENUS 17. C U C U L U S.

T H E C U C K O O.

The beak is weak and bending.

The nostrils a little prominent (or jutting out,) and margined, (or with a rim.)

The tongue flattened, straight, and in the form of an arrow.

The toes two before and two behind, for climbing.

Ten feathers in the tail, which is in the form of a wedge.

THE Cuckoo is rather smaller than a pigeon; he is a bird of passage; he makes his appearance early in the spring, and stays with us but a short time. If the season be mild, he comes the sooner. The Cuckoo is silent for some time after his first coming. His note is cuckoo, from which he takes his name; and he repeats it in the morning, in the spring, from a withered bough, on which he is generally perched.

Unlike the generality of birds, Cuckoos do not pair; it does not appear necessary, because they neither hatch nor rear their young. When a female appears on the wing, she is often attended by two or three males, who seem to be earnestly contending for her. From the time of her appearance, till after the middle of summer, the

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the nests of the birds selected to receive her eggs are to be found in great abundance ; but, like the other migrating birds, she does not begin to lay till some weeks after her arrival.

The Cuckoo makes no nest of her own, for as she is a bird of passage, and leaves this country the beginning of July, instinct impels her to deposit her eggs in the nests of other little birds, particularly in that of the hedge-sparrow, who rears them after her departure.

When the young Cuckoo is hatched it throws all the eggs, and even its fellow-nestlings, out of the nest. The mode of doing this is very curious. The little animal with the assistance of its rump and wings, contrives to get the bird upon its back, and making a resting place for the burden by elevating its elbows, clammers backward with it up the side of the nest till it reaches the top, where taking breath for a moment, it throws off its load with a jerk. It remains in this situation a short time, feeling about with the ends of its wings, as if to be certain whether the business was done properly, and then drops into the nest again. It is wonderful to see the great exertions of the young Cuckoo, when it is two or three days old, if a bird be put into the nest with it that is too weighty for it to lift

out. In this state it seems ever restless and uneasy. But this disposition for turning out its companions begins to decline from the time it is two or three till it is about twelve days old, when it ceases. Its shape is well adapted for these purposes; for, different from other newly-hatched birds, its back is very broad, with a considerable depression in the middle. This hollow seems formed by nature for the design of giving a more secure lodgement to the egg of the hedge-sparrow, or its young one, when the young Cuckoo is employed in throwing either of them out of the nest. When it is about twelve days old this hollow is quite filled up, and then the back assumes the shape of nestling birds in general.

June 27, 1787. Two Cuckoos and a hedge-sparrow were hatched in the same nest this morning; one hedge-sparrow's egg remained unhatched. In a few hours after, a contest began between the Cuckoos for the possession of the nest, which continued undetermined till the next afternoon; when one of them, which was somewhat superior in size, turned out the other, together with the young hedge-sparrow and the unhatched egg. This contest was very remarkable. The combatants alternately appeared to have the advantage, as each carried the other several times nearly to the top of the nest, and then sunk down again,

again, oppressed by the weight of its burden; till at length, after various efforts, the strongest prevailed, and was afterwards brought up by the hedge-sparrows.

The circumstance of the young Cuckoo being destined by nature to throw out the hedge-sparrows, points out why the parent Cuckoo drops her egg in the nests of such small birds. If she were to do this in the nest of a bird which produced a large nestling, the young Cuckoo would probably find it impossible to take possession of the nest, as its exertions would be unequal to the labour of turning out the young birds. Besides, though many of the larger birds might have fed the nestling Cuckoo very properly, had it been committed to their charge, yet they could not have suffered such a great number of their own young to have been sacrificed as the smaller ones, which are so much more abundant; for we have every reason to suppose that the number of nestlings destroyed by the Cuckoo must be very large.

Here it may be remarked, that though nature permits the young Cuckoo to make this great waste, yet the animals thus destroyed are not thrown away or rendered useless. At the season when this happens, great numbers of tender quadrupeds and reptiles are seeking provision; and if

if they find the callow nestlings which have fallen victims to the young Cuckoo they are furnished with food well adapted to their peculiar state. *

Cuckoos feed upon insects and birds eggs; but never upon birds; indeed, they are fearful, and fly from the small birds, who continually pursue and teize them; but the bird called the Wry-Neck is their chief tormentor, for he is ever following them, and warning the little birds of their approach.

On many plants in the summer, a froth is frequently found, which some people have fancied to be the Cuckoo's spittle, but this is quite a mistake; for this froth comes from an insect called the Cicada, and is intended as a shelter for its larva (or the young Cicadas in their grub state.)

Cuckoos moult or shed their feathers very late; and it is said they have sometimes been found in the winter, in hollow trees, without any feathers, and in appearance much like a toad.

Cuckoos, after they are hatched, cannot take care of themselves as soon as many little birds, and they continue to follow the bird in whose

* The preceding account is gathered from Mr. Jenner's Letter to John Hunter, Esq. inserted in the Phil. Tran. Vol. 78. Part 2.

nest they were hatched for support, much longer than her own young ones would have looked for assistance from her.

There seems to be no fixed time for the departure of the young Cuckoos: they probably go as soon as they are able to take care of themselves. They become nearly equal in size and growth of plumage to the old Cuckoos; yet never acquire the well-known note during their stay in this country.

Cuckoos seem to have an aversion to water, and are seldom, if ever, seen to drink.

There are many kinds of Cuckoos, and they live in different parts of the world; but the *Cuculus Indicator* of Africa, is perhaps one of the most wonderful. In the morning and evening his shrill cry, chir, chir, is frequently heard. He seems to call those who are seeking for honey in the wood. They answer his call, and come nearer to him; as soon as he sees them he flies a little way before, and at last alights upon the hollow tree, in which the bees have made their hive. If the hunters do not immediately reach the tree he returns to meet them, redoubles his cries, goes back again to the tree, and perches upon it. He seems to do every thing in his power to point out to them the treasure he has found. Perhaps without the help of man, he might not be able to procure

cure it for himself. Whilst they are taking the honey, he watches them attentively in a neighbouring bush, waiting for his share of the spoil; and they always give him a part, that he may shew them to other trees where there are hives.

GENUS 18. Y U N X.

THE WRY-NECK.

The beak is smooth and pointed, weak and a little bowed.
The nostrils depressed, hollow, and conspicuous.

The tongue smooth, long-shaped like a worm, and ending in a sharp bony point.

Ten flexible feathers in the tail.

Two toes before, and two behind, for climbing.

THE Wry-Neck feeds upon insects, which it pierces and takes with its tongue. The tongue, like that of the Woodpecker, is covered with a kind of glue. Its colours are not very beautiful, but it is streaked in the most delicate manner; a number of black strokes divide the head and the back; and the sides of the head and neck are beautifully marked with fine lines of black, and of a reddish brown.

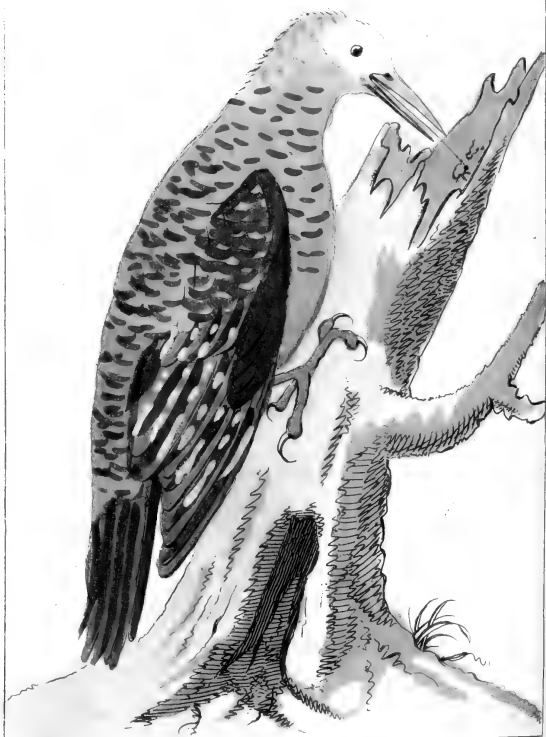
It

It is a bird of passage, but generally visits us before the Cuckoo. It has a strange way of turning its head back to its shoulders, especially when frightened, and this is the reason why it is called the Wry-Neck. This motion is generally not sudden, but gradual, like the Caterpillars when they are going to spin, and with his eyes half shut. One of these birds was confined in a cage; he always turned to face those who came near him, and raised himself upon his spurs, and coming forward with his tail spread, at the same time raised the feathers of his head; then he withdrew hastily, and struck his beak against the bottom of the cage, and this he did frequently. The young Wry-Necks begin to turn their heads about in the nest. The Wry-Neck builds in hollow trees, and generally lays nine eggs. He constantly follows the Cuckoo, and gives the little birds notice when the Hawk is coming. He lives very much in hollow trees, and feeds upon the insects which he finds there; though some say, he takes all his food upon the ground. Though the Wry-Necks have two toes before and two behind, he does not run up the trunks of the trees like the Woodpecker.

He can raise the feathers of his head, and make a crest like a Jay.



ORDER 2
Genus 19. Picus.



WOOD PECKER.

GENUS 19.

P I C U S.

THE WOODPECKER.

The beak is strong, strait, of a many-sided figure, channelled, and at the point formed like a wedge.

The nostrils covered with setaceous feathers, or feathers like bristles.

The tongue smooth, shaped like a worm, very long, armed at the end with a sharp bony point, barbed on each side, or rather beset with little bristles, which turn backwards, and are covered with a kind of glue.

The toes, in all but one kind, are placed two behind and two before, for climbing.

THE tongue ending in a sharp bony point, with bristles on each side, is very fit for taking flies or ants out of hollows in the barks of trees; and flies and ants, and other insects, are its only food.

The Woodpecker's legs are short and strong, for climbing; and their toes, placed two before and two behind, enables them to run up and down the trees, and to hold fast by the branches. The feathers of their tails are stiff, sharp-pointed, and bend downwards, and they bear with the ends of them against the side of the tree, and so support themselves, either when they are climbing up, or descending with their heads downwards.

When a Woodpecker has found an old decayed tree, in which there are worms, or ants eggs, or insects, he fixes his strong claws in the bark, and leaning on the stiff feathers of the tail, he begins to bore with his bill; and, when he has opened a way into their dwelling, he feasts upon the poor insects, darting his tongue through them, and drawing them into his beak.

Sometimes, when he finds an ant-hill on the ground, he pecks with his bill and disturbs the ants, he then thrusts out his long red tongue, and lays it on the ground: the ants perhaps think it to be a worm, (for it is very much like one) and as they are very fond of worms, they settle upon it in great numbers; the Woodpecker then draws in his tongue, and eats them all.

The Woodpecker's bill is very strong, and of a proper form for boring wood. He makes his nest in a hollow tree, and bores a round hole in the side, at which he gets in: but he is very nice in his choice, and as he can easily make these holes, he sometimes leaves a great many before he fixes upon one. Those that he has left, other birds that cannot bore so well, make their nests in, such as the Jay and the Starling. Woodpeckers do much mischief in woods, by boring the trees, which afterwards decay, and sometimes by stripping the bark.

The

The flight of the Woodpecker is very irregular; never in a straight line, but always up and down. Woodpeckers lay about five eggs, greenish, with black spots.

There is at Saint Domingo, or Hispaniola, (an island in the West-Indies) a bird of the Woodpecker kind, called the Carpenter. He spoils many of the palm-trees, for he bores them in many places, and weakens them so much, that they are often blown down by the wind. This bird is not much larger than a Lark; his bill is about an inch in length, and so strong, that in a day he can bore a palm-tree to the center. The palm-tree is so hard, that it turns the edges of the best iron tools.

There is one American Woodpecker which has a bill as white as ivory. Another kind which is found in Brazil, is as large as a Pigeon; he has a scarlet head, and a crest of scarlet feathers which reach to his back.

There is one kind of Woodpecker that differs from all the rest; it has but three toes, two before and one behind. It is found in Sweden, and Siberia which is in Asia, and at Hudson's Bay in America, and is not much larger than a Linnet.

GENUS 20.

S I T T A.

THE NUTHATCH.

The beak is awl-shaped, smooth, strait, the upper mandible rather longer and black, and compressed at the point; the lower mandible white.

The tongue short, horny at the end, and jagged.

The nostrils covered with bristles.

The feathers of the tail are stiff.

The feet formed for walking or hopping; that is, three toes before and one behind.

THE Nuthatch runs up and down the bodies of trees, and feeds upon insects and nut-kernels.

He is a very wise and careful bird, for he saves nuts for the winter; and when he has occasion for them, he brings one at a time from his hoard, and places it in the chink of a tree, and stands above it with his head downwards; then he strikes the nut with his bill, with all his strength, and breaks it, and catches up the kernel before it can fall to the ground.

The female makes her nest in hollow trees, and if the hole be too large, she stops up part of it with clay. She is very fond of her young ones, and will suffer her feathers to be pulled off, rather than

than forsake them. She never leaves them to feed herself, but the male bird brings beetles, ants, and caterpillars, for her to eat while she is sitting.

GENUS 21. T O D U S.

T H E T O D Y.

The beak is awl-shaped, a little flattened, blunt, straight, and with spreading bristles at the base. The nostrils are small and oval.

Feet like the King Fisher's, the middle toe joined to the outer toe to the third joint.

THE male bird is of a light blue on the upper part of the body, and white under the stomach; the throat and sides of a rose-colour.

The females make their nests in dry earth sometimes, mostly in sand, and always in the ground; they dig it with their feet and beak; and first they make a round hole, in which they put straw, dry moss, cotton, and feathers; the female lays four or five eggs.

They catch flies and other insects with great address and skill.

THE KING-FISHER's

Bill is long, strait, strong, and trigonal, (that is to say, three-sided.) Nostrils small.

The tongue fleshy, short, smooth, and sharp-pointed.

In the feet of most, the three joints of the outer toe grow to the middle toe.

THERE are many kinds of King-Fishers, and they live in several parts of Europe, and in Bengal, on the banks of the river Ganges, and in Persia: Bengal and Persia are both in Asia.

There are some kinds of King-Fishers in Egypt, which is in Africa; and some at Surinam, and other parts of America. The King-Fisher is about the size of a Swallow, his bill is remarkably long, and his legs very small. The colours of the English King-Fisher are beautiful; the back, from the neck to the tail, is of an elegant bright and shining blue; the crown of the head is green and blue; the tail is short, and of a rich deep blue.

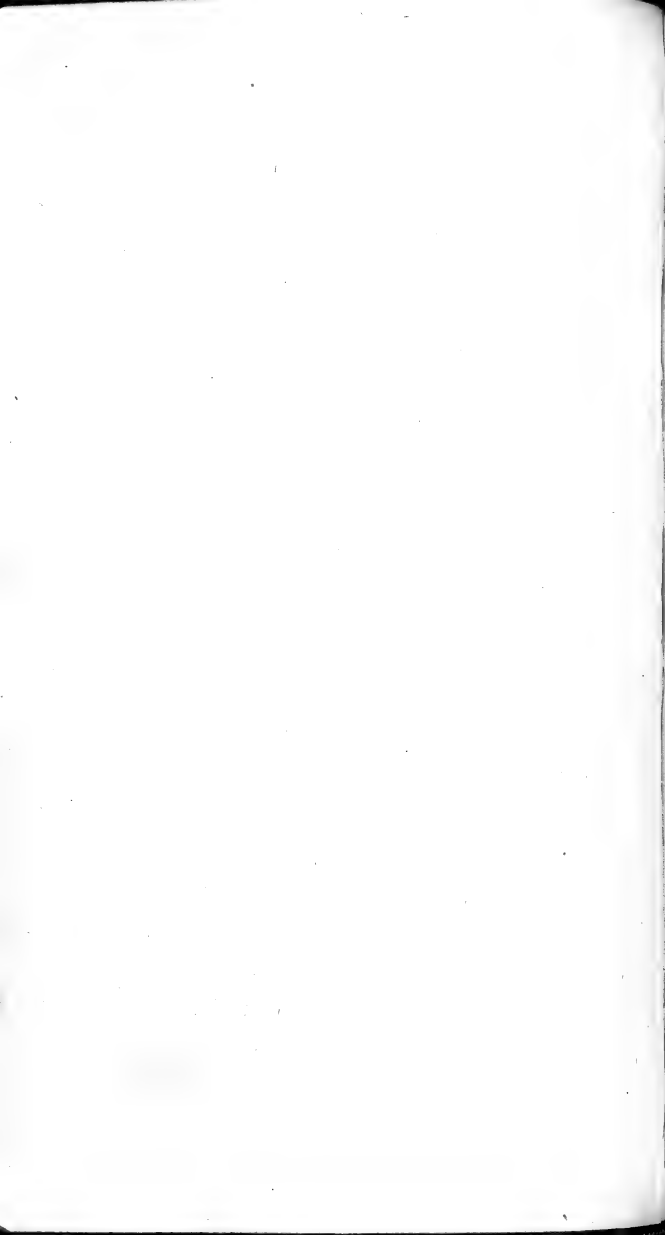
He balances himself upon his wings above the water at a certain distance; and as soon as he sees a little fish swimming near the top, he darts instantly upon it, and brings it up in his feet.

ORDER 2.

Genus 22 • Alcedo.



KING FISHER.



The King-Fishers make their nests on the banks of rivers, and on the cliffs near the sea; they make holes more than three feet deep; sometimes they find holes ready made by water rats, which the water rats have left; then they make their nests there, and line them with the down of the willow.

Though the King-Fisher be a very pretty bird, his nest is dirty; for as he feeds upon fish, we find in it a great quantity of bones, and of scales, which makes it smell very disagreeably.

Whilst the hen King-Fisher sits upon her eggs, the cock is very busy, and brings her fish to eat.

Formerly some people were so silly as to believe, that these birds built their nests upon the sea, in the middle of winter; that it floated upon the surface; and that all the time they were sitting upon their eggs to hatch them, the weather was perfectly fine—and so they called those days, when nothing made them unhappy, Alcyon days; for Alcyon was the name which they gave to the King-Fisher.

The King-Fisher has a very large stomach, like other birds of prey; and like them, he throws up in little round pellets, those parts of his food which he cannot digest, as the scales of the fish, &c.

It is very strange that a bird, whose wings are so small in proportion, should fly so swiftly; if a fish chance to fall out of his beak, from the branch upon which he is perched, he will sometimes catch it before it reaches the water.

He darts down so rapidly, that his fall has been compared to the fall of lead.

In warmer climates there are many species of the King-Fisher; here we have but one; yet he can bear the cold very well; for in the winter, he is seen sometimes to plunge under the ice after his prey. Yet sometimes they perish in the winter.

GENUS 23. M E R O P S.

The B E E E A T E R.

The beak is bowed, or bending; compressed and keel shaped.

The tongue slender, and lacerated (or fringed) at the point, ending in two long threads.

In the feet the three joints of the outer toe grow to the middle toe, as in the King-Fisher's.

THE Bee Eater eats wasps, and grasshoppers, gnats, flies, bees, and other insects, which he catches like the Swallow, as he flies. The children in the island of Candia (which is

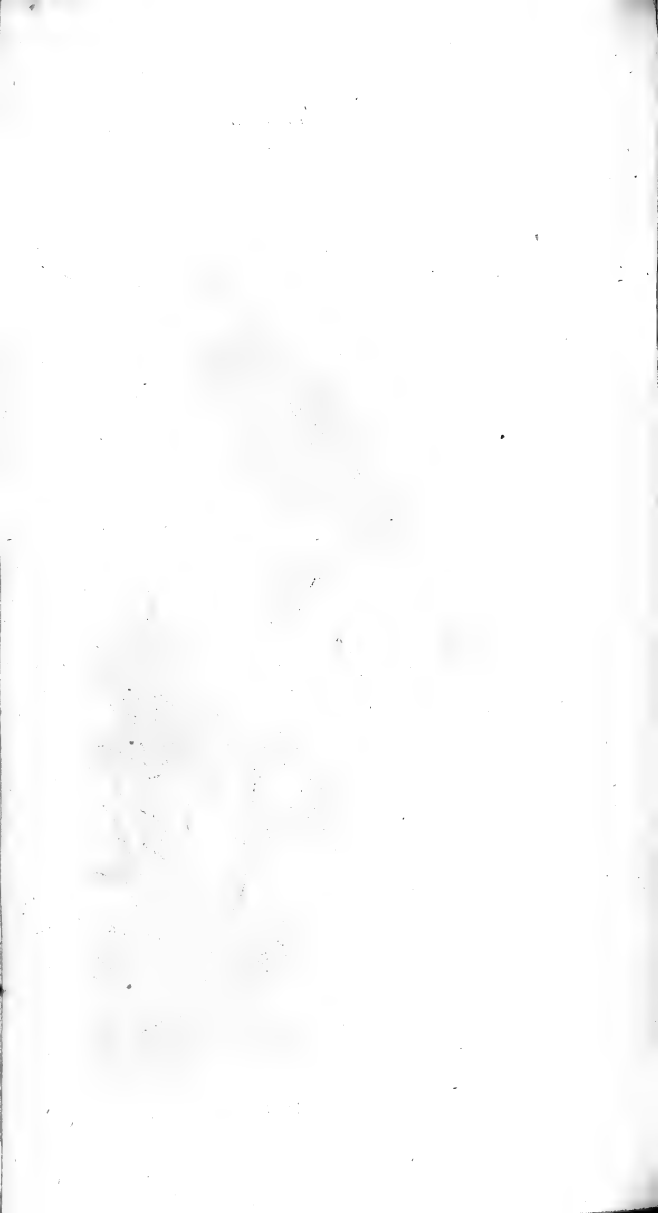
in

ORDER 2

Genus 23 Merops.



BEE EATER.



in the Mediterranean Sea) catch him with a hook and line, in the air, almost in the same way as fish are taken out of the water. They put a crooked pin through a grasshopper whilst he is alive; the grasshopper still flutters about, and the Bee Eater perceiving him, darts down upon him and is taken. This is a very cruel diversion, and certainly would not afford the children any amusement, if they did but consider the sufferings of the grasshopper.

Bee Eaters are seen mostly in warm countries; in England they are seldom found. In colours they very much resemble a King-Fisher, as well as in their feet. Their flight is like the Swallow's, and like the Swallow their tail is forked; two of their tail feathers are longer than the rest.

They make their nests in caverns, and line them with moss. They are gregarious (that is to say, they flock together.)

Some have said, that they fly with the breast upwards; but this may be a mistake. Others too have said, that the young Bee Eaters, as soon as they can fly, attend upon their parents, and procure them food, and serve them with the greatest affection. This is perhaps another mistake; but if it be true, they set little boys and little girls a very good example.

The fore part of the head is a beautiful sea-green; the upper part reddish, tinged with green; the back part of the head and back a brownish red; the breast and tail a greenish blue.

GENUS 24. U P U P A.

THE HOPPOE.

The beak is bowed, or bending, a little compressed; slender, with a furrow running along each side.

A very short triangular tongue, blunt and strait in most.

Feet formed for hopping or walking, three toes before and one behind.

Ten feathers in its tail, and a crest on its head, which it can fold back.

THE Hoppoe can raise or let fall his crest when he chuses; it begins at the base of his beak, and goes to the back part of his head. The feathers in the crest are in a double row, and they are black and yellow.

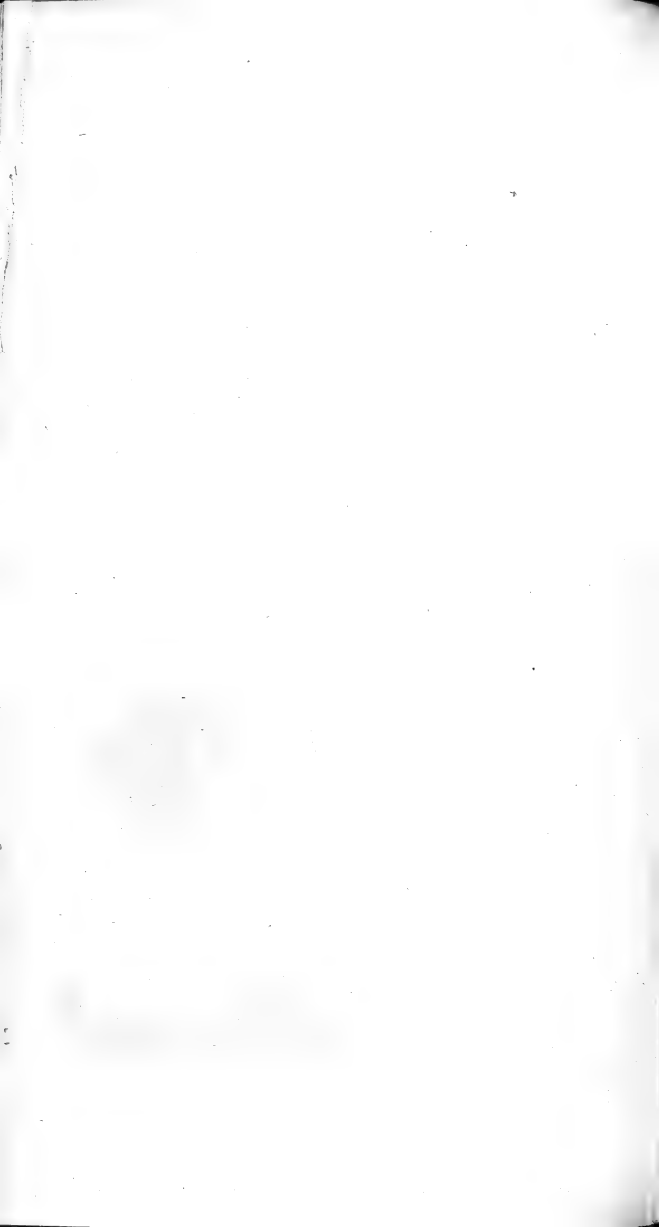
In the middle of the tail is a white spot, like a new moon. The wings and tail are black, with bars of white. It lives on insects, such as ants, and beetles, and caterpillars. It is found in many

ORDER 2

Genus 24 *Upupa*.



HOPPOE.



many parts of Europe, and sometimes in England: when it is frightened it raises its crest.

The back is spotted with black and white; the legs are short; the outer toe is fixed to the middle toe in part.

The natural situation of the crest is to fall down backwards.

A Hoppoe that had been caught some time, was very fond of the woman who took care of it; he seemed never happy but when he was with her only. If strangers came he was afraid, and raised his crest. Though the windows of the house were often left open, he did not wish to make his escape. One day, however, being affrighted by something new, he flew away; he did not go far, but not being able to find his way back, he went into the window of a convent which was left open, and there he died, because they did not know what was his proper food. Hoppoes may be fed with raw meat, and eggs, and worms.

Its common food is those insects which are found on the ground or fly very low, as beetles, ants, worms, dragon-flies, wild bees, and caterpillars. He is generally found in marshy places, where there are many insects. When the waters of the Nile, after overflowing, are returning within

their banks, they leave great quantities of mud behind. When the sun warms this mud it swarms with insects; the Hoppoes then are found on its banks. They feed upon the insects, and follow the waters as they retire.

At Grand Cairo (which is the capital of Egypt) there are many Hoppoes. They build their nests on the tops or terraces of the houses.

In Egypt they live together in little companies. In most other countries they go only in pairs. In Europe they are only birds of passage, and do not stay all winter.

Like Woodpeckers, they lay their eggs in the holes of trees. Their nests are extremely dirty, for the little birds being sunk down so low in the tree, they cannot throw out the dirt.

A Hoppoe that was given to a lady seemed very fond of hearing music, and whenever she played, would place itself on or near her harpsichord.

The Egyptians say, that the young Hoppoes are very fond of their parents; that they warm them when they are old under their wings, and when they are moulting, help them to pull off their feathers.

In this perhaps the Egyptians may be mistaken; but if it be true, they set us a good example, for we ought to be grateful to our parents who have been so careful of us.

GENUS 25. C E R T H I A.

T H E C R E E P E R ' s

Bill is bowed, weak, and slender, a little triangular, (or three-sided,) and pointed.

The tongue pointed, and gristly at the end.

The feet formed for walking or hopping, or three toes before and one behind.

THE head, back, and wings are of a dusky red, or brownish colour; the throat and breast white; and the back and wings brown; the legs are short.

The tail is long for the size of the bird, and very proper to assist him in climbing.

The tongue is not longer than the bill, but it is armed with a bony point.

The toes and claws are very long. He creeps up and down trees in search of insects to feed upon. Creepers breed in hollow trees, and some say, lay twenty eggs; but M. Buffon tells us, that they never lay more than seven. They have three toes before and one behind, and they can run not only up and down and round the tree, but under the branches, with their backs downwards.

Their

Their beaks are not strong enough to strike the bark to frighten the insects, so they prey upon those which they find upon moss and bark, and sometimes follow Woodpeckers, to catch some of those insects which they have disturbed.

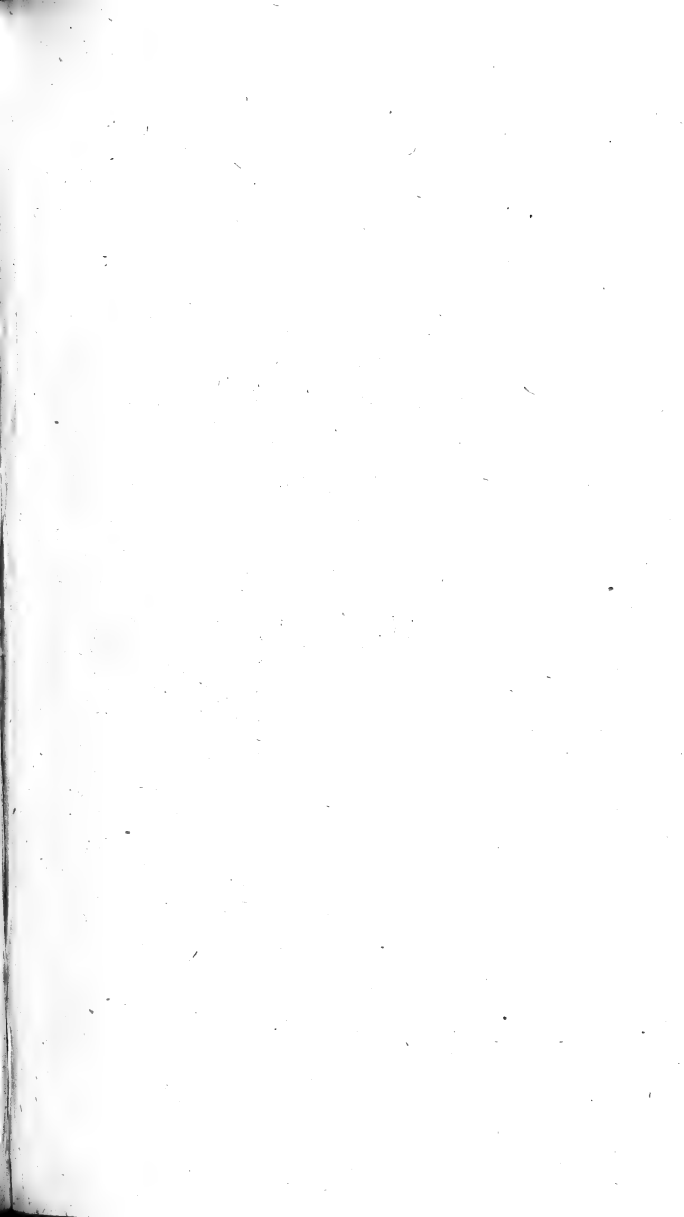
As Creepers live only on insects, they are found in greatest numbers in warm countries, where insects most abound.

They seem sometimes rather larger than they really are, because their feathers do not always lie smooth, but often stand upright.

There is one kind of Creeper that frequents church-yards, and lays its eggs (when it has the opportunity) in human skulls.

There are Creepers in all warm climates, both in Europe and America; their plumage is very beautiful.

One kind, called the Angala, makes its nest of the down of plants. It is frequently hunted by a spider nearly as large as itself, and very fierce; who often seizes the young and sucks their blood.



ORDER 2

Genus 26 *Trochillus*.



HUMMING BIRD.

Published Oct. 2^d 1786 by Jos. Johnson St Pauls Church Yard London.

GENUS 26. TROCHILLUS.

THE HUMMING BIRD:

The beak is in the shape of an awl, but as fine almost as a thread; it is a little bent, tubulated, or trumpet-shaped at the end, longer than the head, and the upper mandible sheathes the lower.

The tongue is thread-shaped, tubulous, with two united threads, but divided at the point.

The feet formed for hopping or walking.

There are ten feathers in the tail.

THE Humming Bird is the smallest of all birds. There are several kinds, from nearly the size of a Wren to the size of a Humble Bee.

They only live in warm countries, in the East-Indies and in America (where flowers are constantly growing;) their colours are more beautiful than can well be imagined, and very brilliant or shining; many seem spangled with gold and precious stones, and some have little crests on their heads.

As soon as the sun rises the Humming Birds of different kinds flutter about the flowers, without fixing upon them; their wings move very quickly, and are constantly in motion.

They

They fly like butterflies from flower to flower, and with their little tongues (which are like a tube or pipe, and forked at the end) they suck the honey, and that is what they live upon.

Their nests are very curious. They generally hang from the end of a branch of an orange or of a citron-tree. The hen bird is busy in building it, whilst the cock goes to fetch cotton, and moss, and the finest grass. It is about as large as half an apricot, and warmly lined with cotton; the outside is the bark of gum-trees glued together. They lay two little eggs about the size of peas, and the cock and hen sit by turns; but the hen only leaves the eggs a little while in the morning, to get some honey when the dew is on the flowers. The little ones are hatched in twelve days, and at first are no larger than a great blue fly.

There was a gentleman in America who found a nest of little Humming Birds (or Colibris) in a shed, near his house: he put them into a cage, and placed it in his chamber window. The old birds came to feed them every hour in the day; and they soon became so tame, as to live from choice almost constantly in the room, with their young ones.

They frequently came and settled upon his hand, and he fed them with wine and biscuit and
sugar.

sugar. They flew into and out of the chamber when they wished, but they were always attentive to the gentleman's voice, and came whenever he called them.

One night, unfortunately, he forgot to hang up their cage, and the rats came and devoured them. It was a great pity that the gentleman should have been so careless. It is very thoughtless to catch birds, and to imprison them in a little cage, and to prevent them from flying about as they like in the open air, and from hopping about from bough to bough, and from singing to one another, and from enjoying themselves: but to put them first into so small a prison as a little cage, where they have no room to fly, and can only get what we give them, and cannot escape from cats or rats, that would hurt them, and then to neglect them, is very cruel indeed.

The Indians frequently dry Humming Birds, and wear them as ornaments. The Peruvians make curious pictures of their feathers.

Humming Birds have great courage; they will frequently attack birds twenty times as large as themselves, and letting themselves be carried along by them as they fly, still continue to peck them.

There

There are two kinds of birds that are called Humming Birds ; but they differ in this, the beak of the real Humming Bird is strait, that of the Colibri, or the second kind, a little crooked, and its body more taper.

All the birds we have been reading of, since the Butcher Bird, that is to say, the Parrots, the Toucan, the Indian Raven, the Beef-eater, the Ani, the Corvi, such as the Raven, Crow, Rook, Royston Crow, Jackdaw, Jay, Magpie, Nutcracker, and Cornish Chough. The Roller, the Oriolus, the Grakle, the Bird of Paradise, the Curucui, the Cuckoo, the Wryneck, the Woodpecker, the Nuthatch, the Tody, the King Fisher, the Bee eater, the Hoppoe, the Creeper, and the Humming Bird. These are all of the Pie kind, because their beaks are compressed and convex on the back, like a wedge, and as if intended for cleaving.

Their legs short, and rather strong.

Their flesh tough, and not good for food.

They feed on berries, insects, and carrion, and a variety of things.

They make their nests chiefly in trees, the male bird feeding the female whilst she sits.

They pair.

That

That great Being, who created all things, has given every animal the means of procuring food, and of taking care of itself. The more we know of his works, the more we may admire his wisdom and goodness.

The parrots climb from bough to bough, for they are too heavy to hop; therefore, that good Being has given them very strong toes; and one toe is moveable, so that they can turn it before or behind as they please, and can grasp the boughs very fast, or hold their food in one foot, whilst they stand on the other. Their beaks too are hooked, which is of great use when they climb.

The Toucan and the Indian Raven have both very large beaks, but that they may not be a burden, they are in both very light. Toucans live in those countries where there are a great many Monkies; now Monkies are very fond of catching and eating their young: so that wise Being has given them very large beaks to frighten the Monkies away as they sit upon their nests.

We find too, that most animals, whilst they are providing for themselves, are at the same time of use to some other part of the creation.

The Beef-eater and Ani feed upon the insects that breed under the skin of cows, and other cattle.

tle.—These insects would be very painful to them, when they increased to great numbers.

Ravens and Crows live upon carrion, that is to say, upon dead carcases, which men do not eat. These carcases would soon smell disagreeably, and in hot countries infect the air, and perhaps make the inhabitants die, if they were not devoured by the Ravens and Crows.

We ought to thank that good Being too, for having taught the Rooks to feed upon the worms and larvæ, which live under the surface of the earth; otherwise, they might increase so fast as to eat up all the corn, and then there would be nothing left to make bread for us.

The covering of the Magpie's nest, shews the kind care of that good Being from whom it learnt thus to preserve its young from birds of prey.

How wonderfully are the tails of the Nutcracker, the Woodpecker, and of other birds contrived, to assist them in climbing trees: because they are obliged to run up them in search of insects.

He has taught the Orioles to hang their nests at the ends of the slightest boughs, to secure them from Monkeys and Serpents.

The Cuckoo in Africa cannot procure honey himself; therefore that good Being has directed him to seek the assistance of man.

The

The Woodpecker, who is obliged to pierce the trees, has a very strong beak, and a curious tongue which he can dart out to a great distance ; it is armed with a bony point, and covered with a kind of glue, to secure its prey.

The Nuthatch, with many birds of the Raven kind, provides a winter store.

The Bee Eater, Hoppoe, and Creepers, prevent insects from increasing too fast.

The curious tongue of the Humming Bird, is well contrived to draw the honey from flowers.

We shall therefore find, that if birds had the same sense that we have, they would all have great reason to thank that Being, who has taught them to get food and to take care of themselves. For there is not a quadruped, or a bird, or an insect, which he does not provide for.

Little boys and girls, whom he has made capable of thinking, should never forget these things ; but whenever they eat, or drink, and are happy, let them always consider, how much they are obliged to that kind Being for all they enjoy.

END OF THE FIRST PART.

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THE
NATURAL HISTORY
OF
B I R D S.

ORDER III. ANSERES.

The beak is rather blunt; covered with a membrane, or skin; it is gibbous at the base, broad and nervous at the point, and the sides are denticulated, (or uneven like a saw.)

The tongue is fleshy.

The feet are webbed, for swimming.

GENUS 27. ANAS.

The bill is strong, broad, flat (or depressed), convex, and blunt, the edges of the mandibles are marked with sharp lamellæ, (or teeth,) and commonly furnished at the end with a nail.

The tongue is fringed, and blunt.

The nostrils are small, and oval.

The toes are four in number; three are placed before, one behind, and the middle toe is the longest.

THERE are many species of the *Anas* Genus; viz. Swans, several kinds of Geese, and Ducks.

ANAS CYGNUS.

THE SWAN.

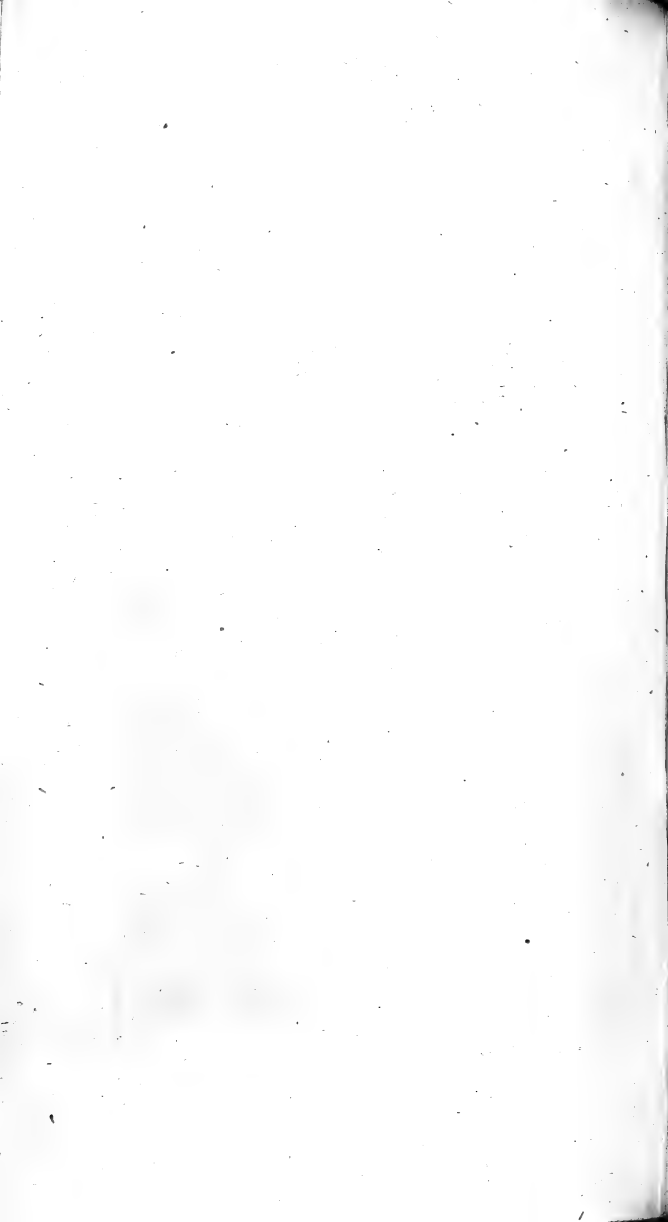
The Swan has a black, callous knob at the base of his bill; when he grows old, his feathers become white. Swans lay seven or eight eggs; they are two months in hatching. They feed on water-plants and insects; and will sometimes eat grain, if it be given them. Some people formerly were so silly, as to imagine that they always sang just before they died; but this is quite a mistake, for the tame swans seldom make any noise at all. When they are going to lay, they fix upon a lonely bank, or an island; and there make their nest, of water-plants, long grass, and sticks; the male and the female both help. When they have hatched, it is not very safe to go near them; for their pinions, or wings, are so strong, and they can strike such a blow with them, as would break an arm or a leg.

The Swan's neck is very long, and he is a most elegant and majestic bird when he is swimming. Many of them are to be found upon the salt water creek, or inlet, at Abbotsbury, in Dorsetshire; and upon the river Trent, and on the Thames. They are said to live two or three hundred years.

ORDER 3
Genus 27. Anas.



SWAN.



The Wild Swan's beak is black, and it has a yellow case.

Wild Swans do not breed in Great-Britain; but sometimes they come to Lingey, which is one of the western Islands. In the summer, they are found in Lapland. In the lakes of that country there are vast numbers of the larvæ of gnats, and other insects; and multitudes of swans, and geese, and ducks, and goofanders, and divers, and other water fowl, go to pass the summer there. Before the winter begins, (which in those northern countries is exceedingly cold and severe) they come to warmer climates.

Swans are found in the deserts of Tartary, and in Siberia, as far as Kamschatka, (Siberia is in the north of Asia;) in Egypt, which is in Africa; and in many parts of America: the Indians of Louisiana, which is in North America, wear their skins, with the down upon them, sewed together: their chiefs put the longer feathers in their caps.

In August they lose their feathers, and are not able to fly. Then the people of Kamschatka, and of Iceland, hunt them with dogs, which catch them by the neck, and kill them; and sometimes they destroy them with clubs. The skin of the legs they take off whole, and make it into purses, which look like shagreen.

The GOOSE is another bird of the *Anas* genus.

The beak is large, and semi-cylindric, that is, convex (or raised) and smooth at the base.

Geese are found in Europe, and in North America. They live to a great age, sometimes seventy or eighty years. There are many different kinds, and most of them are wild: their feathers are generally white, or white and grey. Great numbers are bred in Lincolnshire.

Some gosherds * keep an hundred, each of which perhaps will have seven young ones. Whilst they are sitting, they are in the same house with the gosherd; in every room he has three rows of wicker pens, one over another; the gosherd drives all his geese twice a day to water, and brings them back, and puts those who lay in the highest pens, in their proper places: he knows them all so well, that he seldom makes a mistake; for though wild geese, and all wild fowl, of the same kind, be marked in the same manner, yet all domestic birds, or poultry, of the same kind, become in time very differently marked, and no two are exactly alike; so that every man may know his own from those of other people.

* A Gosherd is a man who takes care of a flock of geese; as a Shepherd is a man who takes care of a flock of sheep.

The

The gosherds pull off the feathers from the geese four or five times a year ; which is very cruel : for besides hurting them, if the weather should be cold, many of them die. We use their quills for pens, and their feathers in our beds and pillows.

Whilst the tame goose sits, the gander visits her twice or three times a day ; and sometimes takes her place : and after she has hatched, he walks about with her and the goslings, and seems as if he would attack any thing that may come near them.

All geese, both wild and tame, have a white ring round their tails : wild geese fly very high, and mostly in a line ; their cry is sometimes heard when they are at so great a height, as scarcely to be seen. Where there is a flock of geese, one always watches, whilst the rest sleep ; and that he may not forget himself, he stands upon one leg, and so they watch by turns : if that goose that is watching, hears any noise, he makes a cackling, and awakens the rest.

Rome is the capital of Italy, and was once the first city in the world : the Gauls wanted to take it, and they had burnt and destroyed many of the buildings ; but the Capitol, which was a large fortress, (or place of defence) was still in the

8 THE NATURAL HISTORY

hands of the Romans. The Gauls attempted to climb up the walls in the night ; but some Geese, that were in the Capitol, heard them, and gave the alarm. The Romans immediately pushed down the Gauls ; so that the greatest city in the world was once saved by a few Geese.

The tame Goose breeds but once in a year ; but if the eggs be constantly taken away, she will lay enough for three broods.

There are many kinds of Geese, the Brent Goose, the Bernacle, the Bean Goose, the grey lag Goose, and the white fronted Goose ; the Shield Drake is a beautiful bird of the Goose kind, the bill is broad, and of a bright red, it swells into a knob at its base ; the forehead is flattened, the head, and upper part of the neck, are of a fine blackish green, the lower part of the neck white, and the upper part of the back an orange bay. Shield Drakes inhabit the sea-coasts, and breed in rabbit-holes : when any body goes to take their young, they pretend to fly along as though they were wounded, that he may run after them ; this gives their young ones time to get away. For this reason they were called Fox Geese. They lay fifteen or sixteen eggs, and in winter they fly together in great flocks. Sometimes they will
carry

carry their young, from one place to another, in their bills.

There is a Goose found in Falkland's Islands which is called the Loggerhead Goose: its wings are so short, that it cannot fly; but it uses them like oars, upon the water, and moves so fast, that it is not very easy to be shot. In order to catch the Loggerhead Geese, the sailors rowed round a flock in their boats, and forced them on shore; for a little while they ran very fast, but they soon grew tired; and when they sat down to rest, the sailors overtook and killed them.

The Bustard Goose inhabits Falkland's Islands. It stands very high on its legs, and with its long neck above the grass, sees if there be any danger near.

The Snow Geese are very common at Hudson's Bay; they come there twice a year, in May and September, but stay only a short time: the inhabitants kill many thousands; they pluck their feathers, take out their entrails, and put the bodies into holes dug in the ground, and cover them with earth; the ground freezes above, and keeps them sweet all the winter.

In Siberia (for they are found in Siberia) they are taken in nets: a man is covered with a white skin, and creeps before them; they mistake him

10 THE NATURAL HISTORY

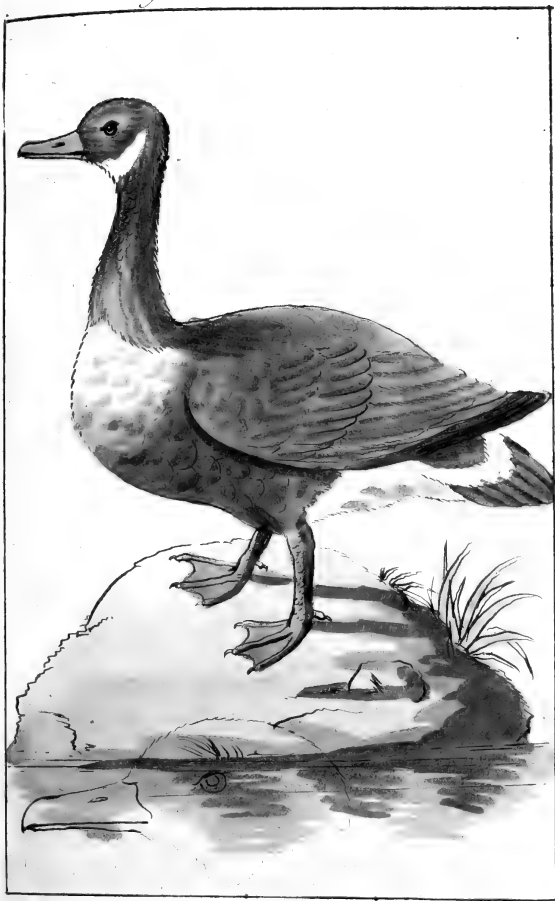
for their leader, and go after him, whilst other men follow, and drive them into nets, or a kind of pound.

The Canada Geese are found as far north in America as Hudson's Bay: they come there in April or May. The inhabitants kill many thousands, and salt them, and put them into barrels. When they are expected, the Indians make a row of huts, of boughs, across the parts which they suppose the Geese will pass; and as the flock flies over, the Indians mimick their noise; the Geese stop in their flight, and each Indian having two guns, fires the one after the other; and sometimes a good shooter will kill two hundred in a day. The Indians keep many of them all the winter in a large hole dug in the ground; they cover them with mould, and keep them in their feathers.

There is a Goose called the Ruddy Goose: it is found in the southern parts of Russia, and of Siberia: in the winter it flies into India. It makes its nest in the craggy banks of the Wolga, and of other rivers; or in the holes of the Marmots, which they have deserted*. It forms burrows for itself like the Shield Drake: sometimes it

* The Marmot is a little animal of the Rat kind, that burrows under ground, and sleeps all the winter.

ORDER 3
Genus 27 Anas.



CANADA GOOSE.



makes its nest in a hollow tree, and lines it with its own feathers. The male and female sit by turns: when the young are hatched, the parent often carries the young to the water in its bill. The male and female are very fond of each other; for if one be killed, the other will not fly away, until it has been frequently shot at.

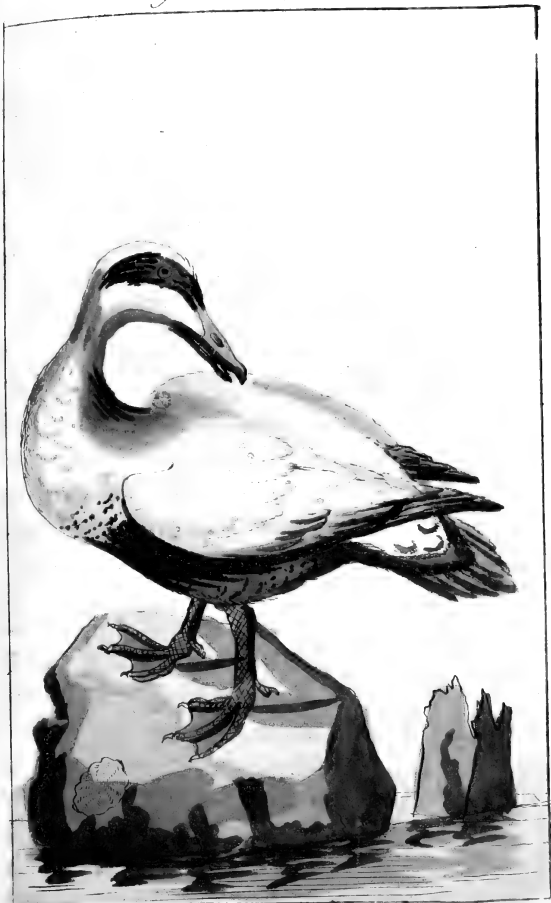
There is a kind of Goose on Bering's Island. Bering's Island is between the northern coast of Asia and America. The natives pursue these Geese in boats, at the time of moulting, and kill them; sometimes they hunt them on land with dogs; and sometimes they catch them in pits, covered with grass.

The Brent Goose is another kind: it comes in the winter on the English coast. In Holland and Ireland, they are sometimes taken in nets, which are placed across the rivers. In the year 1740, they came in such large flocks on the coast of Picardy, in France, that they destroyed all the corn near the sea, by tearing it up by the roots; and though many of them were knocked down and destroyed, yet the people could not be relieved from them, until the north wind, with which they came, ceased to blow, and then they all went away.

The Eider Duck is of the Goose kind: it is double the size of a common duck; its bill is black and cylindric, with a wrinkled and divided cere; the feathers of the cheeks, and of the fore part of the head, come far upon the bill, and form two sharp points; the forehead is quite black. There is a broad black bar, which goes from the corners of the bill, across the eyes, to the back part of the head; and the legs are green.

It is found on the western islands of Scotland, and in Norway, Iceland, and Greenland; its down is very soft, and light, and elastic; it is used in coverlets for old people, who want to be kept warm, but cannot bear a covering that is heavy, such as blankets. The Eider Duck lays five or six eggs, among stones, or plants, near the shore; and makes a very warm nest by pulling the down from her breast. The people who live near the shore, watch her, and take away both the down and the eggs. The duck lays again, and is then obliged to pull all the rest of the down from her breast. If she be robbed again, she will lay a third time; but then the Drake must find the down for the nest, because there is none left upon the poor Duck. Three pounds of this down may be pressed into a space, a little larger than an orange; yet

ORDER 3
Genus 27 Anas.



ELDER DUCK.



yet it will spread so much, as to fill a quilt five feet square.

Besides these, there are many others of the *Anas* kind; the Golden Eye, the Wigeon, the Pintail Duck, the Pochard, the Garganey, and the Teal.

The Mallard, or common Duck's bill is strait; the middle tail feathers of the male turn up; the head and neck are of a deep shining green; the upper part of the breast, of a purplish red: it has a rich purple spot on the wing. The birds of this species pair in the spring, and lay from ten to sixteen eggs. In Lincolnshire they are wild, and in great numbers; and many are taken every year in decoys.

A decoy is a large pool, surrounded by trees: from the pool there are several pipes, or channels, which grow narrower; the sides of these pipes are planted with reeds, so that the decoy man can walk behind them without being seen; and they are covered with a net, which is supported by hoops, in the form of an arch.

There are Ducks, called Decoy-ducks; these are tamed, and taught to come when they hear the decoy-man's whistle: he throws hemp-feed on the water, especially in the pipes, or channels; and this hemp-feed swims: the decoy-ducks come to eat it, and are followed by the other Ducks, up
this

this pipe, until they get under the net ; then they are taken. The decoy-ducks immediately dive under water, and go back again into the pool.

In China, they throw upon the water a number of gourds ; the wild Ducks being used to see them, are not afraid, but swim near them. The Chinese, in order to take the Ducks, scoop out the inside of other gourds, and make a few holes to see and breathe through ; they then put them over their heads and faces, and go into the water. Nothing appears above the water but the gourds : as the Ducks do not at all regard them, the man easily gets amongst the flock, and pulls them under water, by the legs, one after another, until he be satisfied.

The wild Ducks are very artful birds, and do not always make their nests close to the water, but frequently at a good distance from it ; the old Ducks will then carry their young between their beaks or their legs. Sometimes ducks will lay their eggs in a high tree, in a Magpie's or a Crow's nest that has been deserted. And there has been an instance of a Duck sitting upon nine eggs in an oak-tree twenty-five feet from the ground : the eggs were laid upon small twigs, placed crossways.

In France, they watch when a flock of wild Ducks is flying near ; and let out a tame Duck, who entices the wild ones within gun-shot ; and so they are killed. They are sometimes taken with hooks, baited with sheep's lights, which swim upon the water.

In the river Ganges, (which is in India) they take Ducks very much in the same manner as in China ; only instead of gourds, or calabashes, they use earthen vessels, such as the Gentoos boil their rice in. The Gentoos are a very harmless, good, and humane people, who inhabit the East Indies. They live only upon vegetables, because they think it is cruel to put any thing to death : and they never use the same vessels to boil rice in twice, but throw them, after once using, into the river ; so that the Ducks are used to see them. In the same manner they take wild Geese in South America ; only they use a hollow wooden vessel to put their heads into.

In China, they prefer tame Ducks to those that are wild. They hatch them by the heat of a fire ; the eggs are placed in boxes of sand, on a brick hearth ; and the hearth is properly heated. The little Ducks are fed with crawfish, and crabs, cut small ; and in about a fortnight provide for themselves. They are then put under the care of an old

old Duck, into a sampane, or boat : when in this boat, the whole flock, perhaps three or four hundred, go out to feed, and return at the word of command. When the crop of rice is cut, the plantations afford much food for the Ducks ; and though several thousands, belonging to different boats, are feeding in the same plantations, they separate when they are called, and each comes to its own boat : and yet on the river at Canton, there are perhaps forty thousand of these boats, all moored, or fastened, near to one another. When the Chinese put nets into the water, they are obliged to shoot continually, to frighten away the Ducks ; or they would very soon take all the fish out of the nets.

The King Duck is found at Hudson's Bay, in North America ; its down is as soft, and as useful, as the down of the Eider Duck. The natives sew their skins together, to make themselves clothes, which are very comfortable. They kill the King Ducks with darts. A number of men go in canoes : when they see a flock, they shout, and make as much noise as they can ; the Ducks are too much frightened to fly away, so they dive under the water ; the Indians know by the bubbles where they will rise again, and row

to the place. The Ducks are soon tired, and killed.

There is a Duck, called the Scoter, found on the coast of Scotland. On the base of the bill is a red knob, with a yellow line in the middle; it feeds on small shell-fish, and dives very deep. The Scoters are caught in nets, placed under water, where these shell-fish abound. They fly so low, that their legs often touch the water. They swallow the fish whole, and soon digest the shells.

The Velvet Duck is mostly black; the bill is yellow, except at the base, where it is black, and has a black knob. The lower eye-lid, and a spot in the wing, are white. It is common in some parts of Siberia. In breeding time, the Velvet Ducks go far inland, to lay their eggs: the males then go away, the females stay until the young are ready to fly. They are in great plenty at Ochotska, in Siberia. Fifty or more of the natives go in boats, and surround the flock, and drive them as the tide flows up the river Ochotska; as soon as the water ebbs, they fall upon them with clubs, and kill them.

The Muscovy Duck, from the beak and round the eyes, is bare of feathers, and pimpled; it is larger than the common Duck. Muscovy Ducks
are

are not so called because they come from Muscovy, or Russia; but because of a musky smell which comes from them. Their eggs are of a greenish colour: they lay more eggs, and sit oftener, than other Ducks. When wild, they make their nests on the stumps of old trees; and perch, during the heat of the day, on the branches that are covered with leaves. They are supposed to be natives of South America.

There is a Duck, called the Scaup Duck. It inhabits the northern parts of Europe; it feeds on broken shell-fish. It is found too on the lake Zirchnichew, in Carniola. Carniola belongs to Austria; it is in Germany, and close to the state of Venice. It makes its nest in hollows, in the banks of the lake. These Ducks are killed by the inhabitants with clubs: they drive them out of these holes in the middle of the day, when the sun shines full upon them, and their eyes are so dazzled, that they cannot see; and so they suffer themselves to be killed, or taken.

The Shoveler, another kind of Duck, has a bill very broad at the end, and flattened very differently from any other of the Duck kind. It feeds chiefly on insects and flies, which it catches very cleverly as they fly over the water; and it
is

is very fond of the eggs and larvæ of gnats, which are found in great quantities under water. The Shoveler inhabits Europe and America.

The Ural Duck is found in the lakes near the Ural mountains in Asia ; and it frequents the rivers Oby and Irtysh, in Siberia. It is seldom, if ever, seen to walk on the ground ; for the situation of its legs prevents it, they are placed so far backward ; but it swims well, and remarkably fast ; at this time, the tail is covered with water, and serves instead of a rudder. Its nest is formed of water-plants, and floats like the nest of the Grebe.

The American Wigeon perches on trees, and feeds in company. Like many other kinds of birds, who fly in flocks, they employ centinels to watch and alarm them, in case of danger. At Martinico, which is one of the Caribee islands in the West Indies, they fly in great companies from one rice plantation to another, and do much mischief.

There is a Duck, which was found in Dusky Bay, in New Zealand, which is supposed to live upon the worms that it finds in the mud when the tide ebbs ; because the end of the bill is soft, and easily bends.

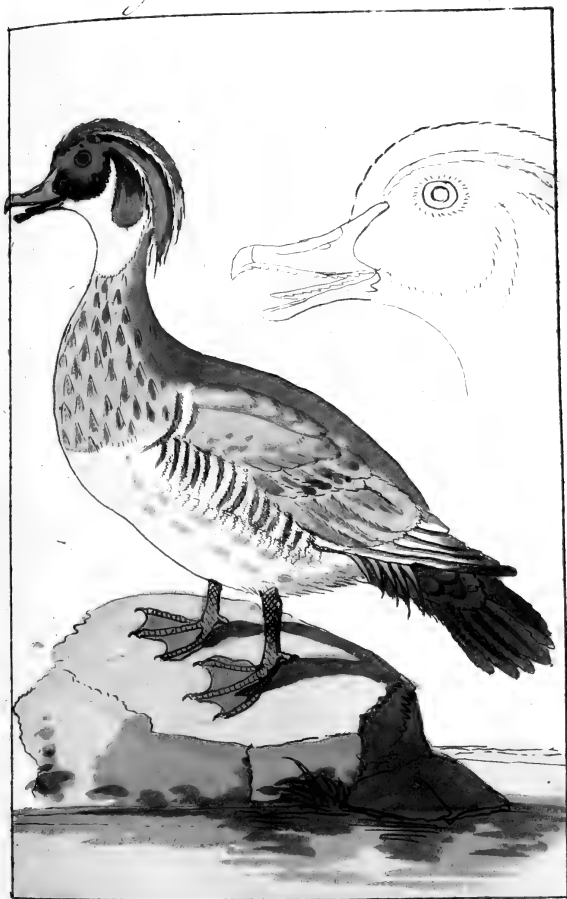
The

The Long-tailed Duck is found in the northern parts of Europe, and of America. It builds its nest among the grass, near the sea, and lines it with the down of its breast, like the Eider Duck. The down is as valuable as that of the Eider Duck, but cannot be procured in large quantities. It lays five white eggs, and carries the young to the water in its bill. It feeds on small fish, for which it dives; and it swims remarkably well.

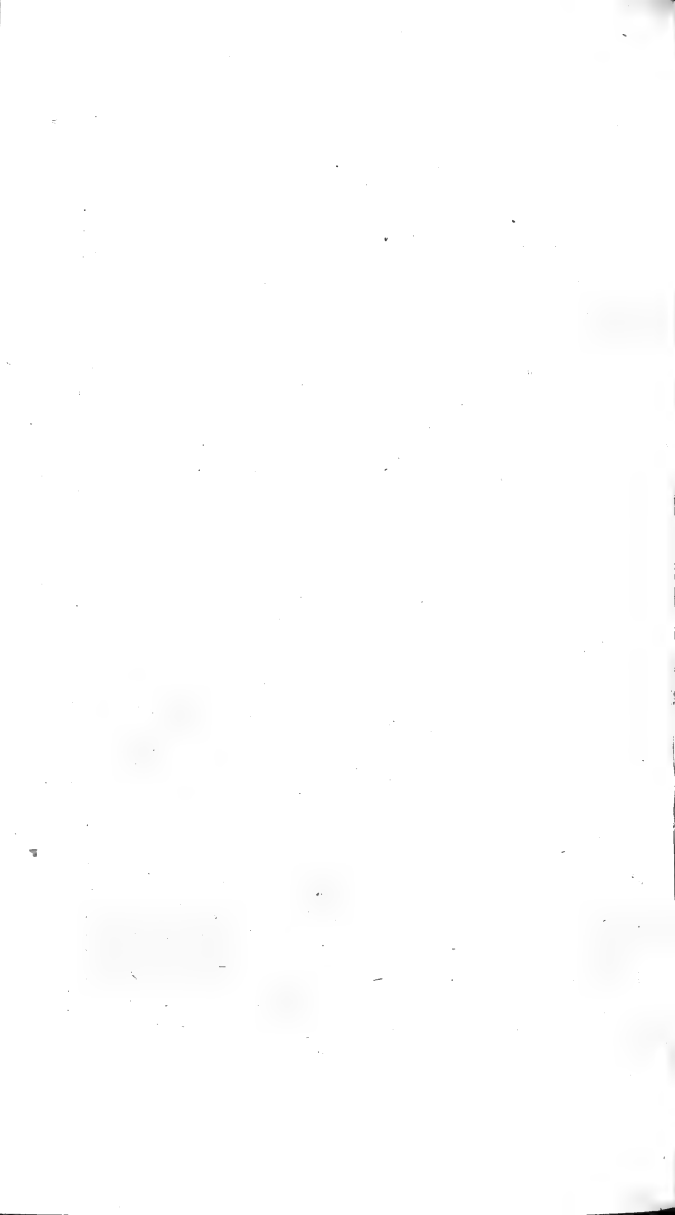
The Golden Eye inhabits Norway and Sweden in the summer. It is found on the English coast in the winter; it dives well, and feeds on small fishes. It is mostly seen in the water, for it is very awkward in walking; and for this reason it cannot be tamed. Besides, its feet grow so tender, that it is soon unable to walk at all, if it be kept on the land. It is found in America and Greenland. It makes a round nest, of grass; lines it with feathers from its breast; and lays from seven to ten eggs.

The Summer Duck is most beautifully marked. Its bill is red, the eye-lids crimson. From the back of the head there is a long and elegant crest, which hangs down the neck. The head and crest are glossy green, which in some situations

ORDER 3
(Genus 27 *Anas*.)



SUMMER DUCK.



situations appears to be purple. The rest of the plumage is very rich and beautiful.

It inhabits Mexico, and some of the West India islands. In the spring it goes as far north as New York, and breeds there. It builds its nest in the hollows of trees, in the holes which have been made by Woodpeckers, and sometimes between the forks of the branches. When the young are hatched, the old Duck takes them on her back to the water. The natives of Louisiana use their necks to ornament their pipes, or calumets of peace with. The calumet is made of a red stone, into the form of the bowl of a tobacco-pipe, and it is fixed to a reed to smoke with. It is, like the olive-branch, considered as the emblem of peace amongst the Indians.

There is a Duck in China, very much like the Summer Duck; it is called the Mandarin Duck. A mandarin in China, is a magistrate, or officer of state.

The Teal is another of the Duck kind. It is frequently found in England in the winter: it stays in France all the year. Its nest is made of rushes, of pith, and feathers: it is very large, and generally built so as to float upon the water among the rushes.

The

The Summer Teal breeds in France. It makes a curious nest, covered on the top, and generally with an opening on one side, towards the south.

GENUS 28. M E R G U S.

The Goosander's bill is slender, furnished at the end with a crooked nail; the edges of each mandible sharply serrated, (or toothed like a saw.)

The nostrils are near the middle of the mandible, small, and subovated, (or rather oval, or egg-shaped.)

The tongue is slender and rough.

It has four toes, three before, and one behind. The outer toe is longer than the middle toe.

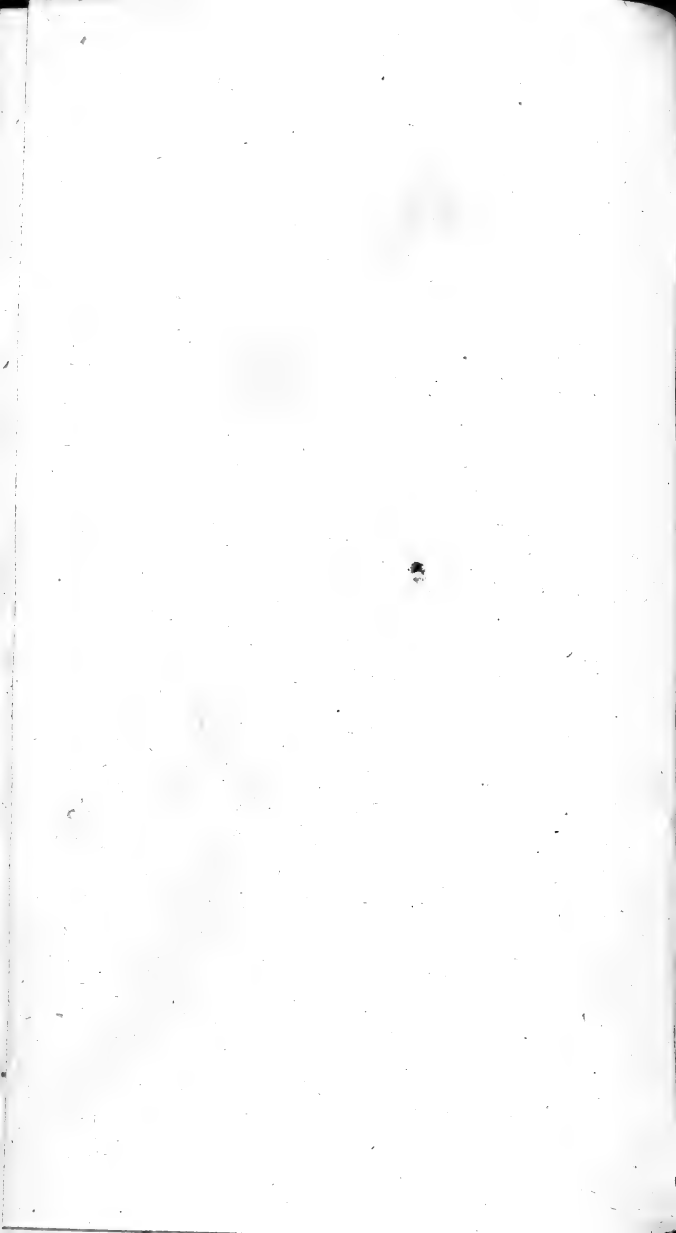
GOOSANDERS, in hard winters, are found in some of the rivers in England. They feed on fish, and destroy such a quantity, that they have been sometimes called Bird Otters; for Otters live very much upon fish. The Goosander sometimes takes a larger one than his stomach can contain; the head part is first digested, and then by degrees his stomach takes in the rest. His rough tongue, and the teeth, or
notcher

ORDER 3

Genus 28 *Mergus*.



GOOSANDER.



of water ; and they row themselves forward with their finny wings, as though they were oars. Their bodies are so closely covered with feathers, that no wet can penetrate or get to them ; they are besides very fat ; and by these means they are preserved from cold.

The Crested Penguin has over each eye a stripe of pale yellow feathers, which lengthen behind into a crest, near four inches long. It is found in Falkland's Islands, and New Holland, and near the Straits of Magellan in South America. When they are angry, they raise their crest. Sailors call them Hopping Penguins, and Jumping Jacks, because they frequently leap three or four feet out of the water. They seem more lively than some other of the Penguins, yet they are very stupid ; for sometimes upon the shore they will suffer themselves to be beaten down with a stick, or to be taken with the hand. The females make their nests in burrows, under ground, which they form with their bills, and they throw out the earth with their feet.

The Patagonian Penguin is the largest that is known : it is found in Falkland's Islands. Mr. Bougainville caught one, which soon became so tame as to follow the person who took care of it. It fed for some time on fish, on flesh, and on bread ;

bread; but it soon pined and died. Its natural food is fish; and the remains of crabs, of shell-fish, and molluscæ, (which are a kind of fish that are like jelly) were found in its stomach.

The Antarctic Penguin inhabits many parts of the South Sea. It is frequently found on islands, and mountains of ice, on which it makes shift to climb.

The Black-footed Penguin is found at the Cape of Good Hope. It swims and dives remarkably well; but on the land, it hops and flutters in a very awkward manner, and if hurried, it continually stumbles. It uses its wings, or stumps, instead of legs, screaming like a Goose. It climbs a little way up the rocks, to make its nest, and uses its bill to help itself up.

The Little Penguins are found in New Zealand. They make their nests in burrows, under ground; and in some parts these hollows are so frequent, that those who walk there are continually falling into holes up to their knees.

Linnaeus divides the Penguins into two genera, or families. Some he places under the Diomedea: in these the under mandible ends abruptly, as though it were cut off, and the nostrils are oval and wide. Others he places among the Phaeton: their
nostrils



ORDER 3

Genus 33 *Pelecanus*.

PELICAN.

nostrils are oblong, the bill is more straight, and the gape extends beyond the beak.

GENUS 33. P E L E C A N U S.

The Pelican's bill is long, straight, strong, hooked at the point, and has a nail at the end.

The nostrils are small, and almost concealed in a long furrow.

The fore part of the head is naked in most.

Each of the four toes are connected (or joined) by a web.

THE Pelican is a very large bird, and has a very remarkable pouch, or bag, under his bill, in which he can carry a considerable number of fish.

The Pelican is larger than the Swan: his wings are very wide; and he can fly very well, and balance himself in the air: he falls like lead in a moment upon his prey; and the violence of his fall, and the extent of his wings, strikes the water, and disturbs it so much, that the fish is stunned, and cannot escape. This is his way of fishing when he is alone; but when they fish in company, they form a large circle, and then come nearer together, making the circle less and less; and

and so inclose the fish, and take them with very little trouble.

These birds generally fish in the morning, or the evening, and chuse those parts where there are the greatest number of fish. It is amusing to see them skim just above the water, then rise a little, and plunge with their bags half full of fish; then rise with difficulty, and plunge again; and so continue until their large pouches be full: they then perch themselves on the points of the rocks, and eat and digest their food at their leisure; and stay there, seemingly stupid, all day, until the evening, and then they go to fish again.

Labat mentions, that some savages had tamed a Pelican; that they sent him out in a morning, and that he would return with his pouch full of fish, which they made him throw out.

The feathers of the Pelican's neck are downy; on the back of the head they are longer, and form a kind of crest; the eyes are small, and placed in the middle of two large naked circles. His pouch will contain twenty pints of water, and is so large, that a man can put his arm into it, up to his elbow. There was a Pelican in the island of Rhodes, (which is in the Mediterranean Sea, near the coast of Turkey in Asia) that used to walk about the town; and there was one in

Bavaria,

Bavaria, which is in Germany, that lived there forty years, and was very tame, and seemed to be pleased with music.

Pelicans are found mostly in warm countries. There are many in Africa; and in Siam, and China, (which are in Asia;) they are found in America, in the Bay of Panama, and almost as far north as Hudson's Bay. The inside of the pouch of the Pelican is not warm like the stomach, and does not spoil the fish; and if the pouch be pressed against the breast, he immediately throws up the fish: the Pelican for this purpose presses his pouch with his bill. The Pelican's nest is near the edge of the water, and placed upon the ground; it is made of grass, and deeply hollowed, and lined with soft grass. If the Pelican be disturbed whilst she is sitting, she takes her eggs out of the nest with her bill, and drops them into the water; and when her fright is past, she brings them back again. The Pelican is a great destroyer of fish, for he eats as many at one meal, as would satisfy six men. He can easily swallow a fish that weighs seven or eight pounds; and will sometimes swallow rats. There was a tame Pelican that used to follow the fishermen to market, and if they did not make haste to tie up his bag, he would quickly steal away part of their fish.

They

The skin of the Pelican's pouch is used to carry tobacco in, and sometimes caps are made of it: the Siamese twist it into strings for musical instruments; and the fishermen on the Nile use the lower mandible, and the pouch, to lade the water out of their boats. There is a wonderful contrivance in the Pelican; the air, which it takes in, passes under the skin. This makes the bird much lighter; and if the body be pressed, one may feel the air escape from it between the fingers.

Pelicans will bring fish to any of their sick or wounded companions. In some places, the natives confine one near the shore, and take part of the fish which the other Pelicans bring him.

One use of the Pelican's bag is, to bring water as well as fish for its young ones. When it builds upon a rock, it is said, that it empties the water from its pouch into a hole near its nest, and that the Camels and wild beasts sometimes come and drink the water, but that they never hurt the young.

The Man of War Bird is another kind of Pelican. It flies further and stronger than any water bird: it seems to poize itself upon its wings, which are of a prodigious length, without appearing to move. It sails smoothly along the air,
waiting.

ORDER 3
Genus 33 Pelecanus.



MAN of War Bird.



waiting for the moment of darting upon its prey swift as an arrow : and when the weather is most tempestuous, the Man of War Bird, light as air, raises itself higher than the clouds, and finds a calm above the storm. He goes some hundred leagues out to sea, and without settling, passes over a greater space than he can fly through in the day ; for he continues his flight in the night, and stops only where his prey is in the greatest abundance. The flying fish out at sea, swim in shoals ; and with their fins, which they can use as wings, they rise into the air, to escape from the Bonitos and Dorados : these are larger fish, which pursue, in order to prey upon them. The Man of War Bird perceives these shoals from afar, and catches the flying fish whilst they are in the air ; or as he skims along the surface, seizes them sometimes with his beak, and sometimes with his claws. The Man of War Bird often obliges the Booby (a smaller kind of Pelican) to provide him with food ; for when he sees the Booby, he flies after him, and striking him with his wing, or his beak, obliges him to let fall, or to vomit the fish he has taken, and the Man of War Bird catches it before it reaches the water.

A gentleman saw in the Island of Ascension, (which is in the Atlantic Ocean) a vast number
of

of Man of War Birds: one attempted to take a fish out of his hand; at the same time, a great number flew just over the pot, in which the meat was boiling, to take it away, though many people stood round it.

Though the Man of War Bird's body be but little larger than that of a Hen, his wings are from eight to ten, or even fourteen feet across. These prodigious wings enable him to take such vast flights; for sometimes in the middle of the sea, the sailor sees no other object than this bird. But their long wings make it very difficult for them to rise, when once they have settled; so that they will sometimes suffer themselves to be struck down, before they attempt to fly. Indeed it is only from the point of a rock, or the top of a tree, that they can easily rise. They build their nests in trees, in lonely places, near the sea; and lay one or two eggs. Their heads are small, and rather flatted on the crown; their eyes are large, black, and shining, and surrounded with a bluish skin, and their tails are forked like a Swallow's. The fat of this bird is thought to be very useful in curing the rheumatism.

The Cormorant is another bird of the Pelican kind, nearly as large as a Goose. It swims and
dives

dives very well. It is a great destroyer of fish. Its feathers are of a blackish colour, glossed with green.

The Cormorant is so greedy, and fishes so well, that he destroys more than a flock of some other birds: as he can dive for a long time, and swims under water swift as an arrow, his prey seldom escapes him: he is often obliged to throw it up into the air, and he catches it so as to swallow the head first, that he may not be hurt by the fins.

In China, they teach the Cormorant to fish: they put a ring round his neck, to hinder his swallowing, and he brings the fishes as fast as he catches them to his master. When his master has enough, he takes away the ring, and lets the Cormorant fish for himself.

There are Cormorants on the lake Baikal, and in Kamschatka, in Siberia. They sleep in great numbers upon the crags of rocks; sometimes they fall off in their sleep, and then they are devoured by the foxes, who are watching for them. The Cormorants there, are so very stupid, that the people of Kamschatka often take them by a knot, that slips, which they endeavour to throw over their heads; the silly bird only moves his head on one side, until he is caught, but never attempts to fly away.

The

The Shag is another bird of the Pelican kind, smaller than the Cormorant. Its bill is toothed on the edges, on each side, like a saw; it has a crest two inches long, and all the feathers of the upper part of its body are of a bright green, edged with a purple cast.

Shags build, like the Cormorant, on trees, and can perch upon them; they swim with the head quite upright, and are very difficult to be shot, because they dive under water upon seeing the flash of the gun. Shags are found on the coast of Cornwall, and near the Isle of Man, and on the coast of Prussia. Mr. Forster (who went round the world with Captain Cook) found them in the cold islands in the south. In these frozen climes they make their nests on the cliffs which jut out over the sea, or amongst the tufts of that long grass, which is almost the only plant that grows there; and having never been disturbed by men, they did not fly away when a gun was fired; they were so far from being afraid, that they suffered themselves to be beaten down with sticks.

The Gannet, or Soland Goose, is another bird of this kind. It is as large as a Goose; the sides of its beak are jagged, that it may hold the fish the better; it has no nostrils, unless they be placed in a long furrow, which reaches almost to the end

of the bill. A naked blue skin surrounds the eye, and from the corner of the bill to the back of the head, there is a narrow stripe of black skin, without feathers. It has a pouch, large enough to contain five or six herrings.

It sits only on one egg; if that be taken, it will lay another, and if that be taken, a third. The nest is large, and made of shavings, or seaweed. Gannets are found on an island in the Firth of Clyde, in Scotland; in the Orkney islands; and in many islands on the English coast; and on the Bass island, which is in the Firth of Forth, in Scotland.

In that island, which is scarcely a mile round, so many of these and other sea-birds build every year, that it is difficult to walk without treading upon their eggs or the young birds; and the number of the old birds is so great, that they darken the air like a cloud. If you stand on the rock, and look down upon the sea, it seems covered to a great distance with birds of several kinds, swimming about, or seeking for their prey.

If you sail round the island, every cliff of the rock is covered with birds, in such numbers, that they cannot be counted; and they make such a noise, that those who speak there, can scarcely be heard.

The

The rocks of St. Kilda (an island on the western coast of Scotland) abound with these birds ; the inhabitants live upon them and their eggs ; they take them in the same manner as the bird-catchers in Norway, by climbing among the rocks, or being let down by ropes.

Fishermen know when shoals of Herrings or Pilchards are near, by the Gannets, who always attend them ; for Herrings and Pilchards are their chief food. They seldom fly over the land, but wind all along the coast, at an equal distance from the shore.

The Gannet can cover its eye with a membrane, or skin, to prevent it from being hurt ; for the Gannet darts headlong with surprizing swiftness into the water after the fish.

Sometimes fishermen tie a Pilchard to a board, and let it float on the sea ; and the Gannet will fly down, and strike it, with so much force as to break its neck.

The Booby is another species of Pelican. Birds of this species are called Boobies, because of their great stupidity, and the habit which they have of shaking their heads ; and because they suffer themselves easily to be caught, or to be beaten down with a stick ; for they do not seem to be at all afraid of man. One cause perhaps of their
seeming

seeming stupidity, may be the difficulty they have of beginning to fly; their wings are so long, that they cannot easily rise from the ground.

The Booby is frequently pursued by the Man of War Bird, for the sake of his prey. The Booby lets the fish he has taken, fall from his beak, or throws it up from his stomach, the moment he is attacked, and the Man of War Bird catches it before it reaches the water. The poor Booby goes to fish again, and is perhaps again deprived of his prey: for though he can fly a long time, and very swiftly, the Man of War Bird can fly still longer, and more swiftly. The Boobies seldom go very far from land; and sailors, when they see them, think that they are at no great distance from some shore. The four toes of the Booby are united by one membrane, and the nail of the longest toe is toothed like a saw.

They frequently alight upon ships, whilst they are at sea, and suffer themselves to be taken. Boobies are found in almost every climate. Some people have been so silly as to imagine, that they hatch their egg by covering it with their foot. Their skin does not grow to their body, but is fastened by little fibres placed here and there, so that they sometimes puff it out like a bladder,

and this enables them to support themselves more easily in the air.

GENUS 34. P L O T U S.

THE ANHINGA, OR DARTER.

The Darter's beak is straight, sharp at the point, and toothed.

Its face is covered with feathers*.

Its feet palmated, or all the four toes connected.

IT is found in South America, and in Africa. Like a serpent, it draws in its very long neck, and then darts out its beak at the fish upon which it feeds. Its head is thickly covered with short, velvet-like feathers. It is a very wild bird, and frequently perches itself, notwithstanding its webbed feet, on the tops of trees, by river sides, or near savannahs that are overflowed. (A savannah is a large open meadow.) Darters build their nests on trees. They are mostly fat, but the flesh is oily, and bad tasted.

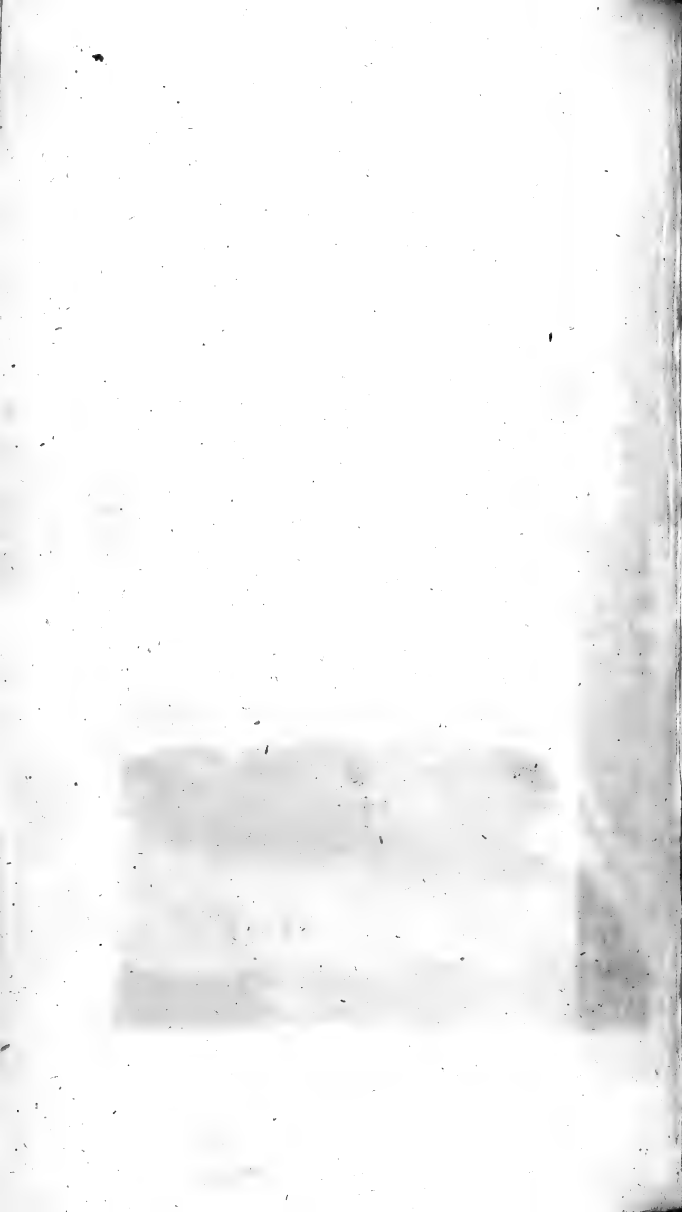
The very great length of the neck is not all that is remarkable in its appearance ; for it has a large

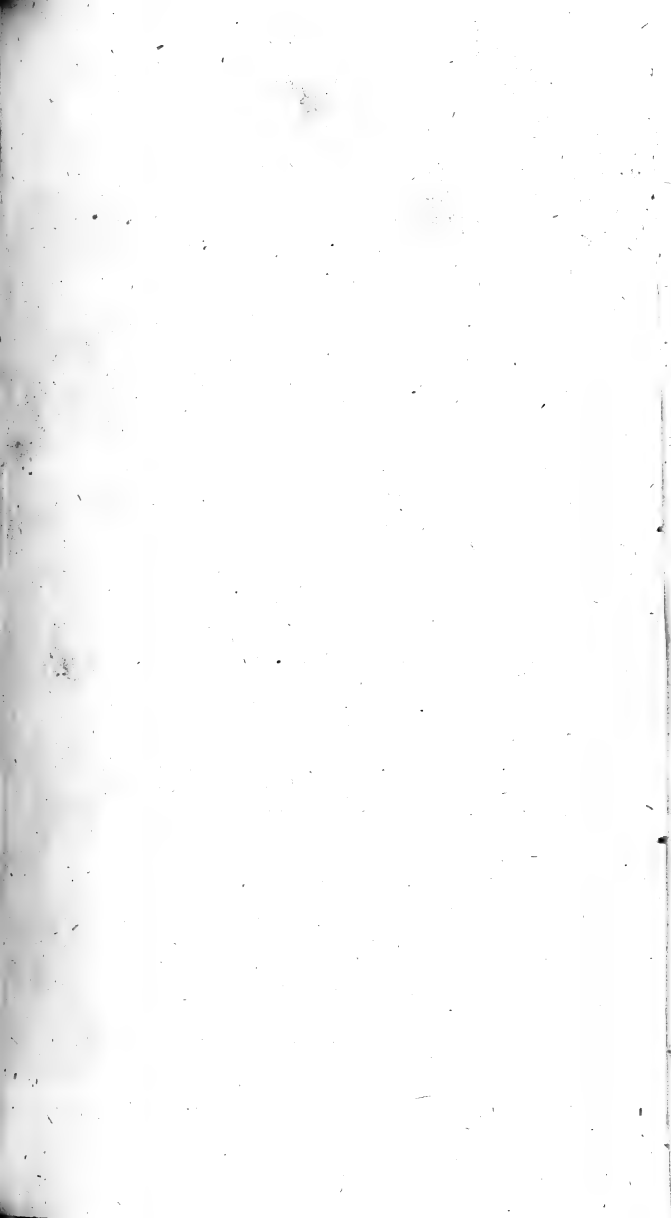
* It is said, that one species of the Darter has its face and chin bare of feathers.

ORDER 3
Genus 34 Plotus.



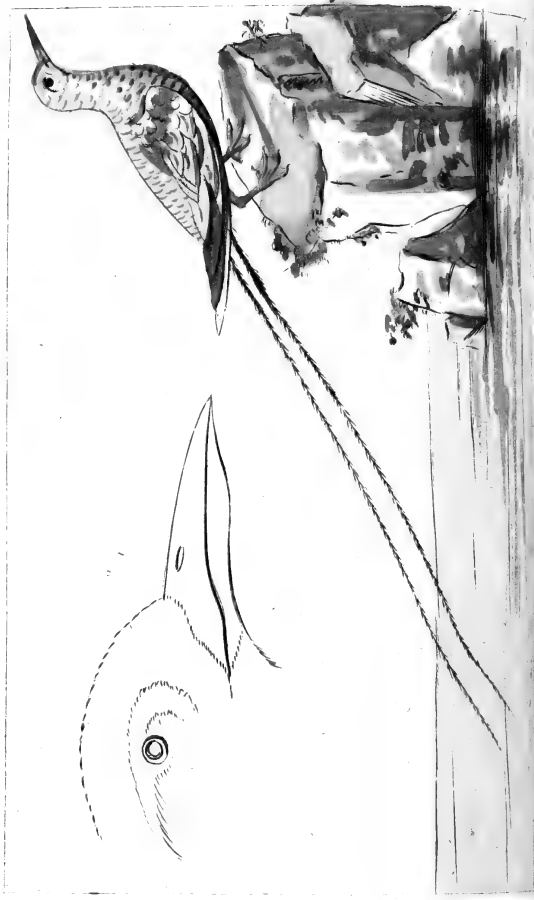
DARTER.





ORDER 3

Genus 35 Phaeton.



and wide tail, of twelve spreading feathers. It swims very well, sometimes with the head only out of water, and on the least appearance of danger, dives entirely under.

GENUS 35. P H A E T O N.

THE TROPIC BIRD.

The beak is compressed, straight, or slightly sloped, and sharp at the point. The gape reaches beyond the bill, which is red, and jagged.

The nostrils are oblong.

The hind toe turned towards the toe before.

THE Tropic Bird is one of the Phaeton kind. It is called the Tropic Bird, because it is generally found in those climates which lie between the tropics, (that is, which are the hottest.) Its feet are palmated, that is, the toes are all joined by one web, and it can rest upon the water with them; in this it is like the Cormorant and the Booby, and like them it can roost upon trees.

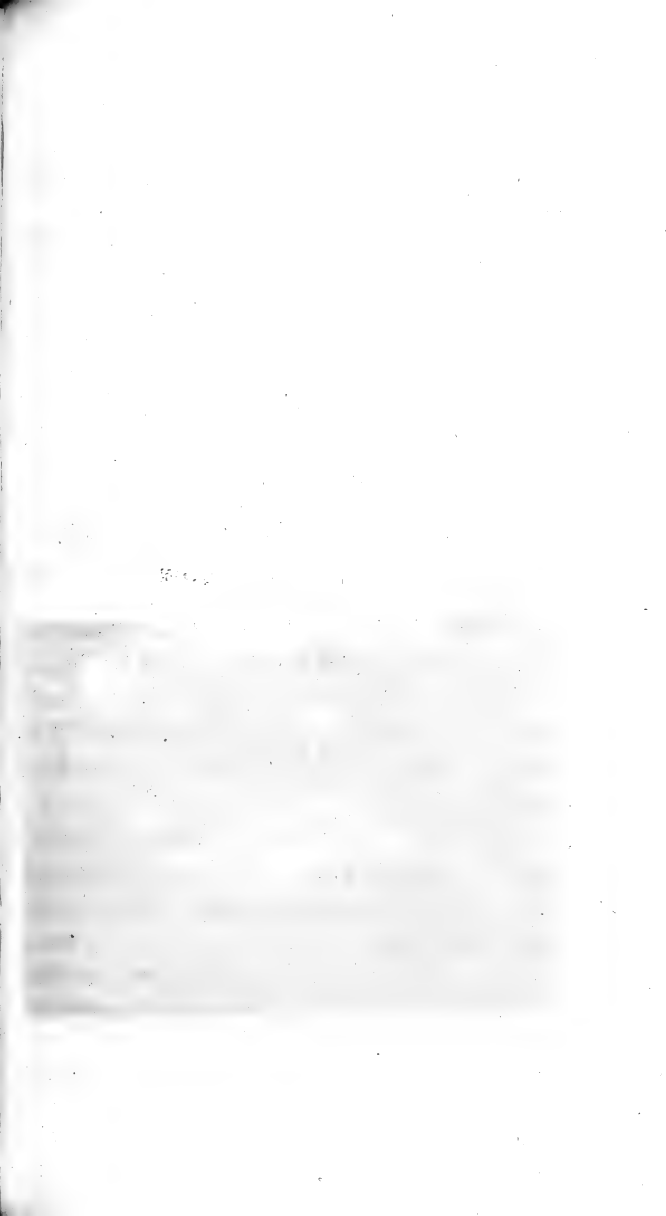
It is about the size of a Pigeon, but it is very remarkable for two long feathers in its tail, near

two feet long. In Otaheite, (an island in the South Sea, visited by Captain Cook) the people use these feathers to ornament their warriors; and in the Caribee Islands, of America, the savages put them through the gristle of the nose, to make themselves appear more handsome, or more frightful.

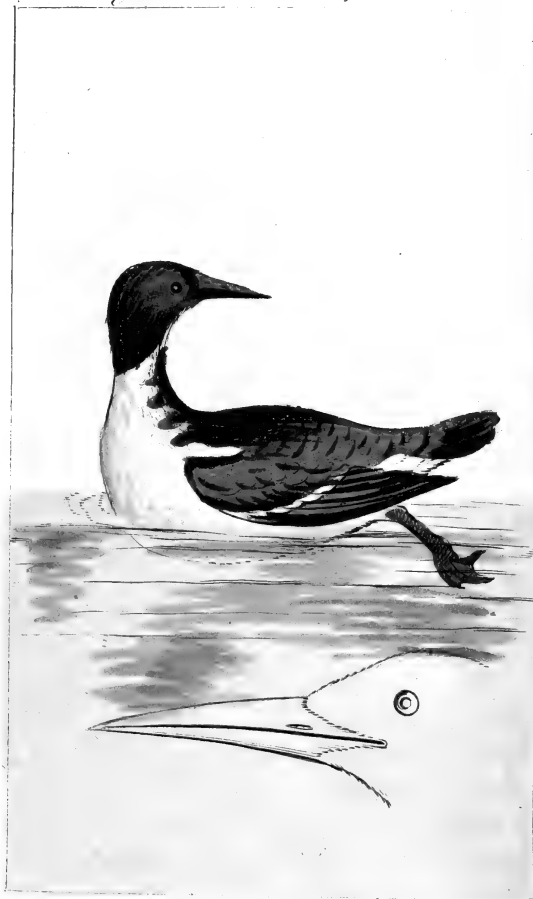
Mr. Leguat says, that in one of his voyages the Tropic Birds were exceedingly troublesome to the sailors, and frequently flew away with their hats. They lay two eggs, and live upon fish.

Sometimes they fly to a prodigious height, and they are often seen with the Man of War Bird, and Boobies, pursuing the Flying-fish as they rise out of the water, to escape from the Dolphins and Bonitos. Sometimes they rest on the surface of the water; and when the weather has been calm, they have been seen perched on the back of drowsy Tortoises, as they have been floating on the sea.

They breed in the woods, on the ground, under trees. They have been found on the islands of St. Helena, and Ascension, in the Atlantic Ocean; and of Mauritius, near Africa, and in New Holland, and many places in the South Seas. In Palmerston Island the trees were quite loaded with them; and they were so tame, as to suffer themselves



ORDER 3
Genus 36 Colymbus.



GUILLEMOT.

selves to be taken off the boughs with the hand. They shed the long feathers in their tails every year.

Linnæus places one of the species of the Penguins under the Genus *Phaeton* ; but this has been described before, under the Genus *Penguin*.

GENUS 36. C O L Y M B U S.

The beak is strong, awl-shaped, (or slender,) straight, and sharp at the point. The sides of the bill, and of the tongue, serrated.

The nostrils linear (or very narrow) and at the bottom of the beak.

The feet placed very backward.

G R Y L L E.

THE BLACK GUILLEMOT.

THE Black Guillemot's beak is black, the inside of the gape, and the feet, are red; the stomach of the female is white. The young are spotted the first year with black and white.

It is very difficult to be shot, for the moment it sees the flash of the gunpowder, it dives. It

5 THE NATURAL HISTORY

makes its nest a great way under ground, and lays but one egg.

The Black Guillemot is found in Caernarvonshire, and in many of the islands near Great-Britain. In the winter, its head, neck, and the upper part of its back, grow white.

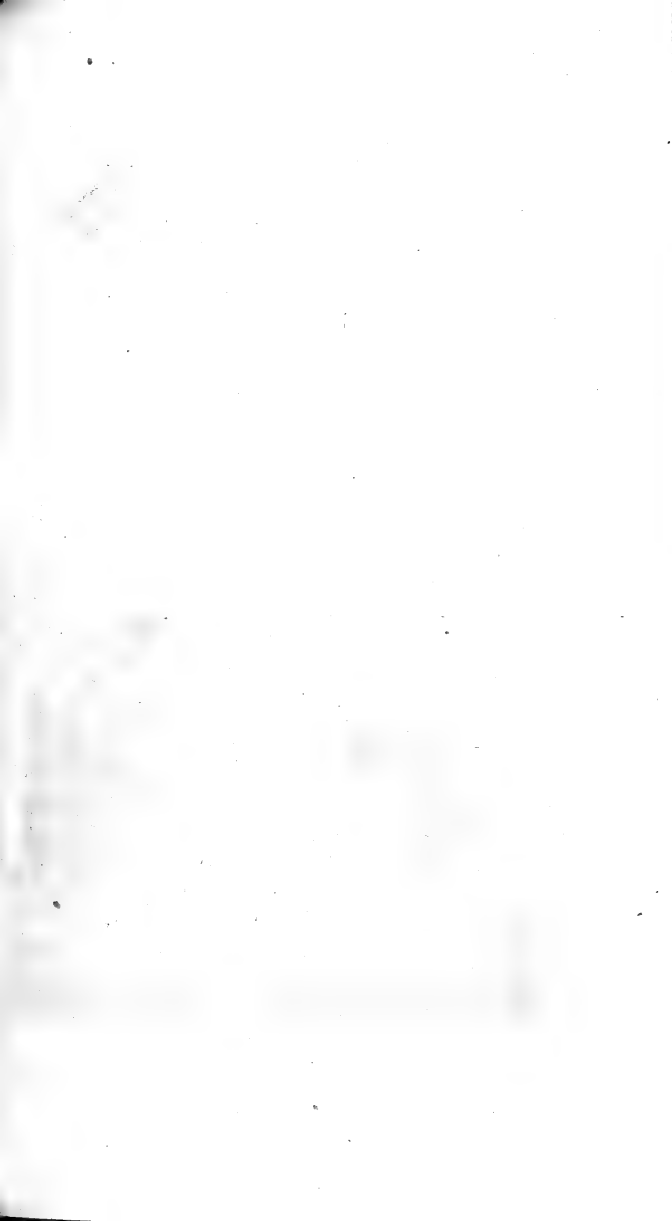
COLYMBUS TROILE.

THE FOOLISH GUILLEMOT.

The Foolish Guillemot has a small process, or knob, near the end of the lower mandible; and short, soft feathers on the upper part of the bill. It is very common on the English coasts, on rocky cliffs.

These Guillemots are very silly birds; for though they see their companions killed, one after another, they only make a little circuit in the air, and alight again on the same places: so that many people go out to shoot them, to learn the art of shooting flying.

The inhabitants of Kamschatka kill them for food, though they be very ill tasted. Their eggs are esteemed a delicacy, and their skins are sewed together for garments.



ORDER 3
Genus 36 Colymbus.



DIVER.

C O L Y M B U S A R C T I C U S.

The Black-throated Diver, or Lumme, walks very awkwardly upon the land, but it very seldom comes ashore. The nest of this species is rarely seen: some have thought that it hatches its eggs under its wing, but this is not likely. The back is black, with little squares of white: it has a thick down upon its skin, like the Swan: and the Laplanders and inhabitants of Sweden dress their skins, and make gun-cases and winter-caps of them. These Divers are remarkably fond of their young: when they are able to leave the nest, both the parents take them to the water; one flies above, to guard them from birds of prey, and the other below, to receive the young in case of their falling. If, notwithstanding this care, the little ones should drop upon the land, the old ones do not forsake them, but rather risque the being devoured by Foxes, which in those cold countries, where they have so little food, are constantly watching for birds.

They take great pains to teach their young to swim and to dive; they carry them sometimes in their beak from rock to rock, and they defend them from birds of prey, under their wings, as a hen does her chickens.

The Black-throated Diver is frequent in the lakes of Siberia, in Iceland, Greenland, and the Ferroe Islands. It is very noisy just before rain.

Divers swim, and dive so well, that they are very difficult to be shot; for the moment they see the flash of the gun, they plunge under water. For this reason, those who go to shoot them fit a piece of pasteboard to the gun, so as to hide the flash.

They move under water with great ease and swiftness: it is there they retire for safety, either from the gun of the fowler, or from birds of prey. But even there they are not safe from the contrivance of man; for they are frequently caught by hooks, to which a little fish is fixed.

Divers build their nests upon the water, amongst rushes, and their nests are always wet.

There are several kinds of Divers. The Speckled Diver is frequent in England. In the river Thames, the fishermen call it the Sprat Loon, for they are seen in great numbers where there are shoals of Sprats.

If any body approach the nest, the old bird immediately plunges into the water, and the young ones, though just hatched, endeavour to follow her.

The Imber is another Diver. It inhabits the seas about the Orknies and the Ferroe Islands,
and

notcher in the beak, are very useful to him to hold the fish, which are slippery.

The Goosander swims with his body under water; his head only appears above. He can dive very well, and for a long time. Though his wings be short, he can fly swiftly; and very often he skims just above the water. The fore part of his body is of a pale yellow; the upper part of the neck, and head, is of a beautiful black, glossed with green; the feathers are fine, long, and silky; and as they are raised from the forehead and back part of the head, the head seems large, and the feathers form a crest.

Though the Goosander be a beautiful bird, yet his flesh is not very good to eat. There is a contrivance in the body for air, which he can use under water.

The Goosander makes its nest on the shore. The female Goosander is always much less than the male, and her colours less beautiful. In the summer they abound in Lapland. In the lakes of that country, Mr. Maupertuis observed a great quantity of the eggs of insects; they looked like seeds; and the Goosanders, and many kinds of water fowls, feed upon them in the summer.

There are several kinds of Goosanders; some are called Deen divers, and some are called Smews;

Smews; but they all have crests, and are found in Europe, except one kind, and that is found in America.

GENUS 29.

A L C A.

THE A U K.

The bill is strong, short, thick, and compressed, (that is, flattened, not like a Duck's bill, above and below, but at the sides.) It is furrowed often across; and the lower mandible is gibbous, (that is, it has a prominence, or knob.)

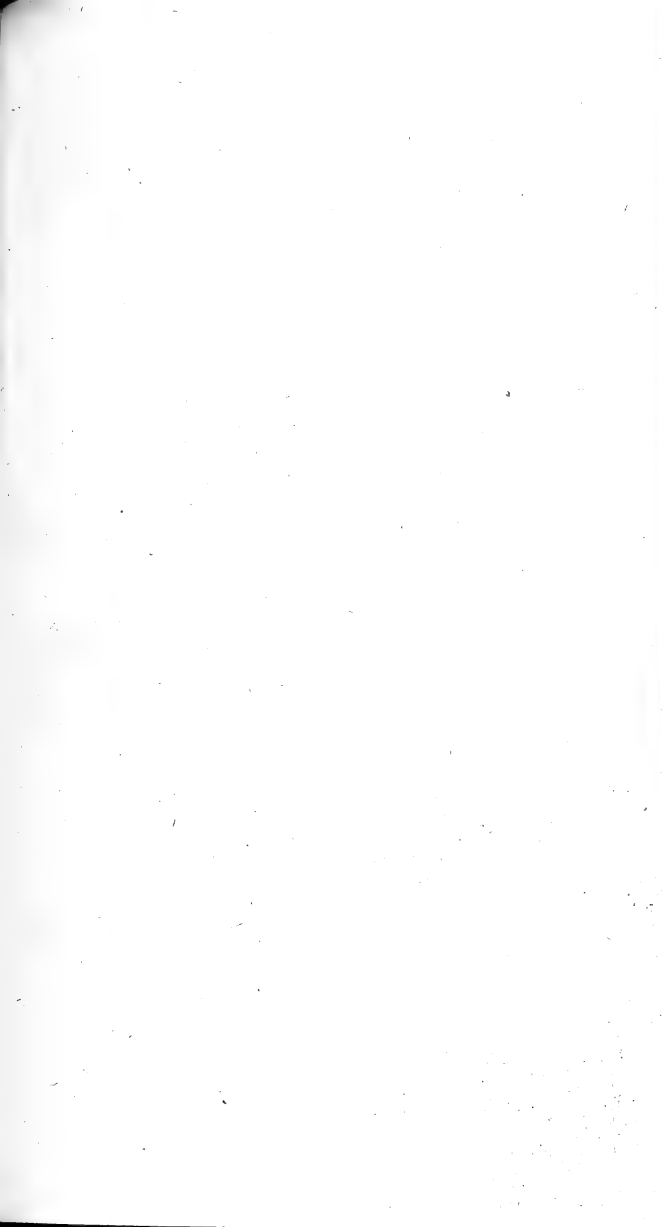
The tongue is almost as long as the bill.

The nostrils are linear, (or very narrow) and placed near the edge of the mandible.

Their legs are placed very backwards, so that when they stand, they appear to be fixed upright upon the tail, and they have no back toe.

In most the toes are three in number, all placed forward. They fit only on one egg.

THERE are several kinds of Auks. The great Auk breeds in the island of St. Kilda; they come in May, and go away in June; their wings are so short, that they can scarcely fly; so the Auk lays her egg very near the high water mark; and if this egg be taken away, she does
not



ORDER 3

Genus 29 *Alca*.



RAZOR BILL.

not lay another that season. The Greenlanders blow the skin which is between the jaws of the Auk, into a bladder, and fasten it to one end of their darts.

Part of the upper bill is covered with short, black feathers, like velvet; it is very strong, and between the eye and the bill is a large white spot; the neck, back, tail, and wings, are black. Their skins are sewed together for clothing. In the seas where they are found, they seldom wander far from the land; and when sailors see them, they always guess that they are near the shore.

The Razor Bill is smaller than the great Auk. Its bill is black, and marked with four furrows on the upper, and three on the lower mandible. From each eye to the bill is a line of white.

They are in great numbers at Flamborough Head, in Yorkshire; and at Caldey Island, near the coast in Pembrokeshire; and in the Isle of Anglesea, and many other islands, and parts of the British coast, where they breed.

They are birds of passage, and they come with the Guillemot in the spring, and leave us in winter. A few of them are seen in February, or March, as if sent before, to give some account to the rest: they go again, and some time after they come in great numbers. If the weather be stormy, many of them die in their passage, and are

B

thrown

thrown up dead on the shore, by thousands, quite lean and starved.

They are not at the trouble of making a nest, but lay each a single egg, on the ledges of the rocks. Numbers of them lay close together. If this egg be taken away, they will lay another, and so on to five; but they never sit on more than one at a time; and though so many lay close to one another, yet each knows its own egg.

The egg is so fixed to the bare rock, by a cement, that it does not roll off. Many poor people live upon their eggs; and to get them, a man fastens a rope round his waist, which is afterwards brought between his legs, so that he sits upon it. In this manner six or seven people, who hold the other end of the rope, let him down the rock, where he finds the birds eggs; he puts them into a basket, that is tied to a string, and drawn up by the people who are at the top of the rock, as often as it is filled.

Sometimes they tie one end of the rope to a tree; and the man who sits at the other end swings himself from one part of the rock to another, pushing himself away by his feet. But in Norway they are much more skilful; for there, several men go under the cliffs in a boat; one has a rope tied round him, and a pole in his hand,

with

with a hook at one end : he fixes this hook in a cleft of the rock above, and draws himself up, climbing with his hands along the pole ; the men who are below in the boat, put the hooks of their poles against his feet, or to his girdle, and help to push him up. When he is got to a place where he can stand firm, he lets down the rope, one end of which is fastened to himself, and so helps to draw up another man, who is supported in his turn by the poles of the men below. Thus three or four men get up, climbing, and helping one another, from some parts of the rocks to others. But sometimes they fall down, and are killed ; and sometimes they pull one another down ; and sometimes loose stones fall upon them, and crush them.

The Black-billed Auk is found on the English coast, and on the coast of the Isle of Candia, and in other parts of the Mediterranean sea. In the bay of Gibraltar, the water is very clear, to a great depth : it is curious to see these birds, under water, darting after the fish, as swiftly almost as though they were flying in the air, and turning after them so quickly in every direction, that their prey seldom can escape.

The Dusky Auk too is wonderfully active in the water, but very clumsy and stupid on the shore.

It can scarcely get upright on its legs ; and then it cannot stand, unless its tail be supported by a stone. It makes its nest in hollow places in the rocks ; and sometimes, in an evening, it will fly on board ships, and may easily be taken with the hand.

The Perroquet Auk is found at Kamtschatka, and on the western shores of America. It makes no nest ; but lays its egg on the bare rock, or sand. Like the rest of the Auks, it is very stupid. The people on the coast where they are found, catch them in this manner : A man hides himself under a loose fur cloak, among the rocks, in the evening ; the birds, as they return to roost, run up the sleeves, or under the skirts, for shelter during the night ; and the man, who has hid himself, kills them as fast as they enter ; and perhaps in one evening takes as many as he can carry away.

The Puffin is another bird of the Auk kind. Its cheeks are white, and so full of feathers, that its head appears large, and almost round. There is a broad collar of black round his neck ; and his legs are small, and orange-coloured : when he stands, he rests on the whole length of his legs. The Puffin with great difficulty rises from the ground ; but when he once begins to fly, few birds can fly longer. In Kamtschatka, the natives

wear

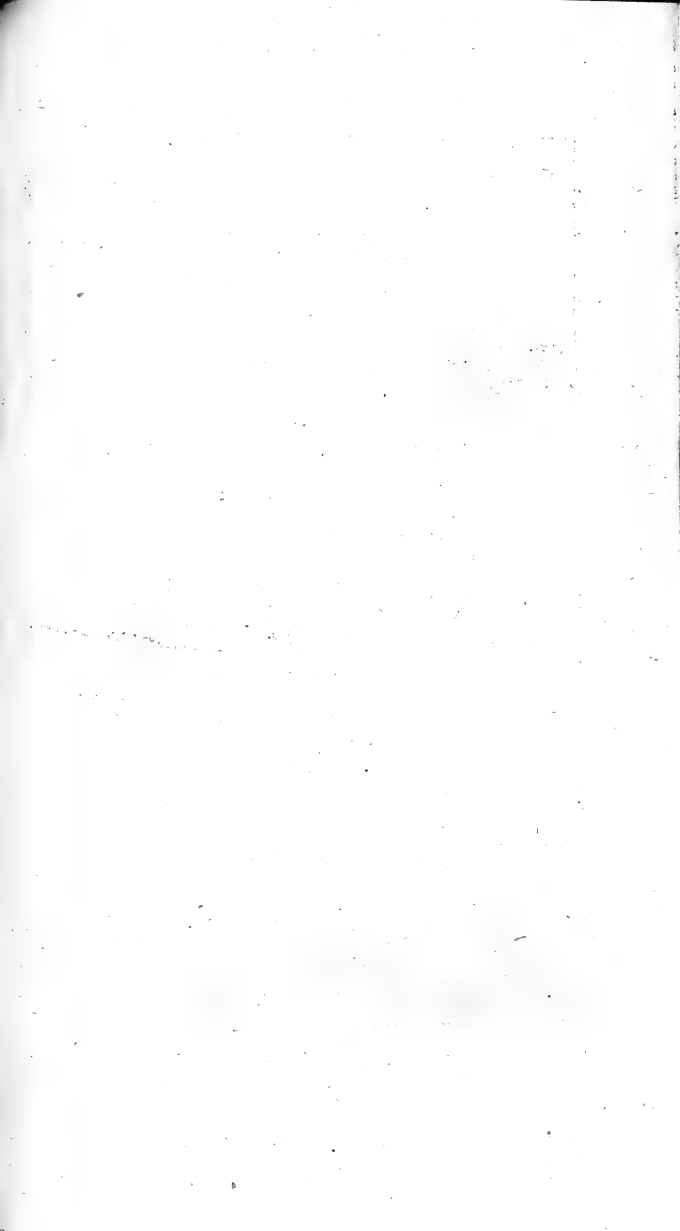
ORDER 3

Genus 29 Alca.



PUFFIN.





ORDER 3

Genus 30 Procellaria.



PETREL.

wear their bills round their necks as an ornament.

The Puffins build in many of the islands on the coast of England. They get into rabbit-holes, and there each female lays one egg, and hatches her young one. Sometimes people take them with ferrets, as they take rabbits; and sometimes they draw them out with a hooked stick, for they can bite very hard, and they make a strange noise, like a dumb person trying to speak. About the middle of August, all the old Puffins go away from England, and leave the young ones behind, that cannot follow them: these are all devoured by the Peregrine Falcon, who watches for them at the mouth of their holes.

GENUS 30. PROCELLARIA.

The Petrel's bill is strait, hooked at the end; both mandibles of equal length; the upper one hooked at the point, the lower compressed, and channelled at the point.

The nostrils are cylindric, (or in the form of a pipe, or tube) lying along the beak, and growing to it. In a few species the nostrils are separate, and in two pipes, or tubes.

Their feet are webbed, and they have a short process, (or spur) instead of a back toe.

The legs are naked, to above the knees.

THE Fulmar is a Petrel, and inhabits the island of St. Kilda, which is one of the western islands, near the coast of Scotland. It

comes in November, and stays until the September following: it lays one large white and brittle egg, and hatches it in the middle of June. There is no bird so useful to the islanders, because it furnishes them with oil for their lamps, and down for their beds, and food for their tables. The oil is taken for a medicine, and it is good for bruises. Fulmars can spout it from their bills to a great distance; and they are very apt to do so, into the faces of those who try to take them. For this reason, they endeavour to catch the Fulmar suddenly, and before he is aware, by the neck, to save the oil, which is of so much use. Fulmars are larger than common Sea Gulls. They follow the Whale-fishers in great flocks; and when a Whale is caught, they settle upon it, and pick out large lumps of fat, even whilst he is alive. Whales have a great deal of fat, or blubber, under their skins; and so have the Sea-lions: for in those northern seas, where they are found, the water is extremely cold; and the fat which they are covered with, prevents them from feeling the cold. The Whale-fishers often know that a Whale is near, by the flock of Fulmars that are flying about him.

The pouch of the under jaw of the Fulmar is formed into a bladder: these bladders are fixed to
the

the end of darts, and these darts are often used to kill the Fulmar.

There is another Petrel, called the Storm Finch, or Stormy Petrel. It is about the size of a Swallow, but its wings are much longer. The whole bird is black, except near the tail, and there the feathers are white. It can spout oil like the Fulmar. It is said, that the people in the Ferro islands, which lie in the northern ocean, about two hundred miles from Scotland, draw a piece of cotton wick through the bird, and light it, and that then it serves for a lamp or a candle; because the flame is fed by the oil which is in its body.

The Storm Finches are always seen at sea, except whilst they are breeding. When a storm is coming, they fly in numbers after the ships, and then the sailors know that they are to expect bad weather. They fly in this manner in the most dreadful storms, sometimes skimming along the hollows of the waves, sometimes on their summits, and they are never seen to rest upon the surface of the sea. The Stormy Petrels have been observed in the white sea, which bounds a part of Russia. They are excellent divers, and stay under water a long time without rising.

The Shear Water is another Petrel: it is about as large as a Gull, and is found in the Calf of

Man, a small island in St. George's Channel, between England and Ireland; and in the Scilly islands, which are a little to the west of Cornwall, and near the English coast. The Shear Water's head, the upper part of his body, his wings, his tail, and thighs, are black; and all the rest of the body white. This bird lays but one egg. The young are taken in August, and are killed, and salted, and put up in barrels; and when they are to be cooked, they are boiled, and eaten with potatoes. All the day they are out at sea catching fish; when they come back in the evening, their stomachs are full of the oil of the fish that they have been eating, and they spout it into the bills of the young ones, to feed them. They make their nests in rabbit burrows, or in holes in the ground.

The Giant Petrel is bigger than a Goose. These Petrels are found near Terra del Fuego, which is the most southern part of South America. They are often seen sailing, with their wings expanded, but not seeming to move, close to the surface of the water. Captain Cook met with many of them in Kerguelen's Land (which is very far south in the Indian Ocean) in December; and they were so tame, that they suffered themselves to be killed by the sailors with their sticks.

They

They feed on fish, and on the dead carcases of whales and birds.

The Pintado Petrels fly in flocks; seldom very high, but generally skimming the surface of the sea. They appear in such numbers, that seven hundred have been taken in a night. The sailors often catch them with a tarred string, or with a piece of lard, and a fishing rod.

There is a kind of Petrel which differs from the rest, because each nostril is a distinct short tube. These Petrels were found in New Zealand, in large numbers; some were flying, some were in holes in the ground, close to one another, or under the roots of trees, and in the crevices of rocks. They made a noise like the croaking of frogs, and flew very much at night, as bats do. They seem very large, because they have a great quantity of feathers, and two feathers instead of one comes from every root; and they lie one within another, and make a very warm covering.

GENUS 31.

DIOMEDEA.

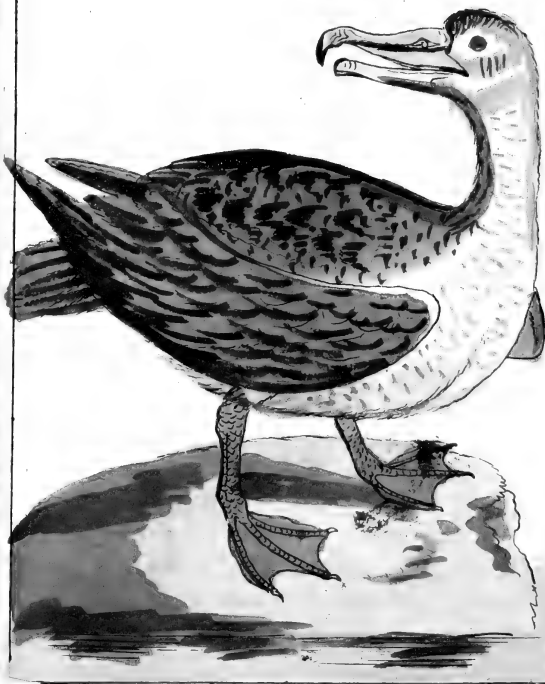
The bill is straight, the upper mandible hooked at the point, the lower abrupt, (or ending suddenly, as if it were cut off.)

The nostrils are oval, wide, opening forward, and on the sides of the beak.

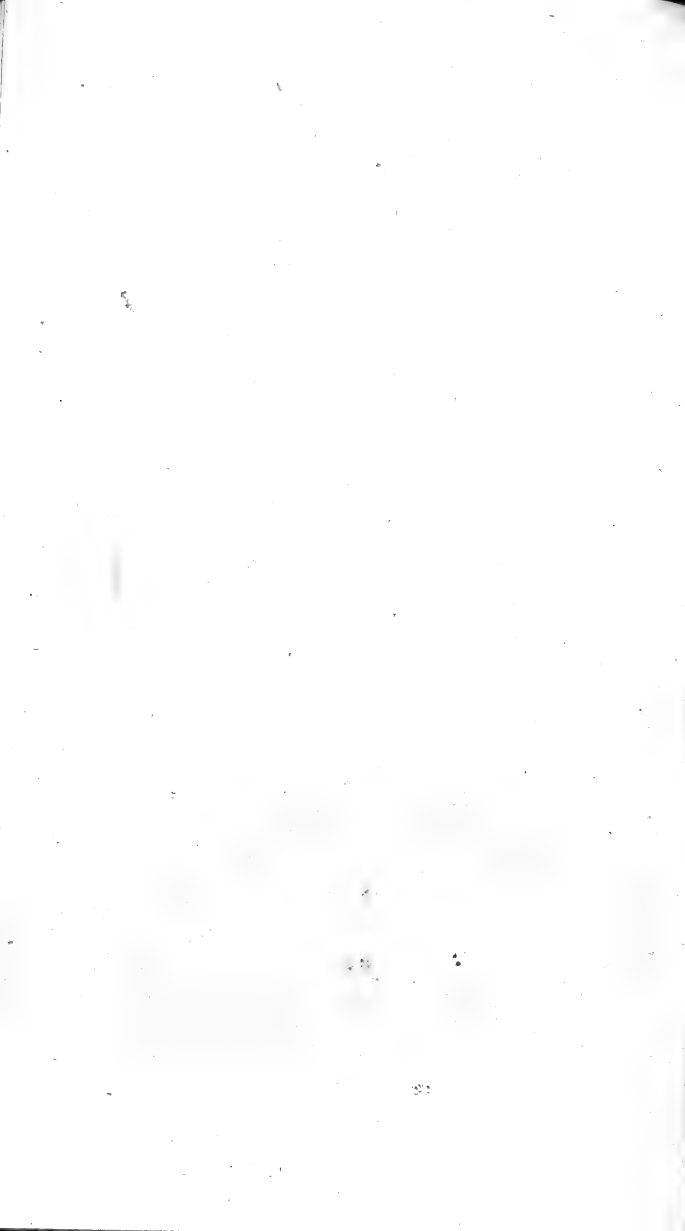
THE Albatross has long wings; and three toes, all placed forwards. It is found at sea, in all the warm and temperate southern climates. It flies exceedingly high, and feeds on Flying-fish, which, when pursued by Dolphins, rise into the air to escape their enemy. The tail of the Albatross is round, and short, not forked; its thighs are naked, and its wings exceedingly long.

The Albatross is larger than a Swan. Towards the end of June, Albatrosses are seen in great flocks, in Kamschatka, and the Kurile islands, a little south of Kamschatka. They come there for fish; and when they appear, the people know that there will be abundance; for large shoals of fish are always observed to come soon after the Albatrosses. When they first come, they are very lean; but they soon become fat. They are very
devouring

ORDER 3

Genus 31 *Diomedea*.

ALBATROSS.



devouring birds, and destroy large quantities of fish: they will often swallow a Salmon of four or five pounds weight; but as they cannot take it all at once into the stomach, the tail will frequently hang out at the mouth. The bird in this situation cannot well fly away, and so is easily destroyed.

The Albatrosses are often taken with a hook, baited with a fish, but not for food, because they are very bad tasted; but for their intestines, which are blown up like bladders, and used as floats, to prevent the upper part of the fishing-nets from sinking. The bones of the Albatross are made into needle-cases and tobacco-pipes. They breed in Falkland's Islands, and in Patagonia. Patagonia is the most southern part of the continent of South America. Their nests are made of earth, upon the ground; they are round, about a foot high, and with a cavity or hollow upon the top. The eggs are very good food. It is remarkable, that the whites of their eggs do not grow hard with boiling. While the female sits, the male is constantly on the wing, and supplies her with food; and they are then so tame, that they will suffer themselves to be pushed off the nest, whilst the eggs are taken from under them. Their eggs are often destroyed by a Hawk, who darts

down upon the nest, the moment that the female Albatross leaves it, and flies away with an egg. The Albatross is often persecuted by the Skua Gull. As soon as the young Albatrosses leave their nests, the Penguins take possession, and hatch their young in the same nest.

GENUS 32.

PENGUIN.

The bill is strong, straight, bending towards the point, furrowed on the sides.

The nostrils are linear, and placed in the furrows.

The tongue is covered with strong spines, pointing downwards.

The wings are small, and more like fins; covered with feathers no longer than those on the rest of the body, and useless for flying.

The body is covered with thick short feathers, with broad shafts, and lying almost as close together as scales.

The legs are short and thick, and placed very much behind.

It has four toes, all placed forwards; the inner toe loose, the other three are webbed.

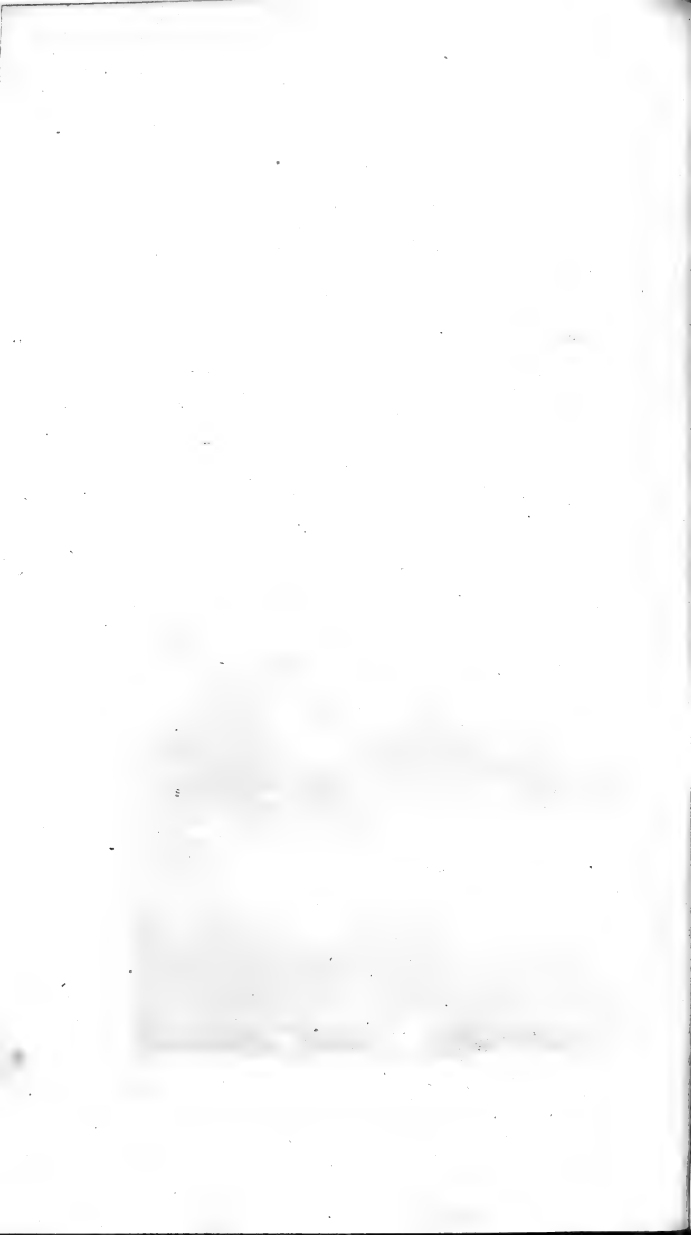
The tail is very stiff, and consists of broad shafts, scarcely webbed.

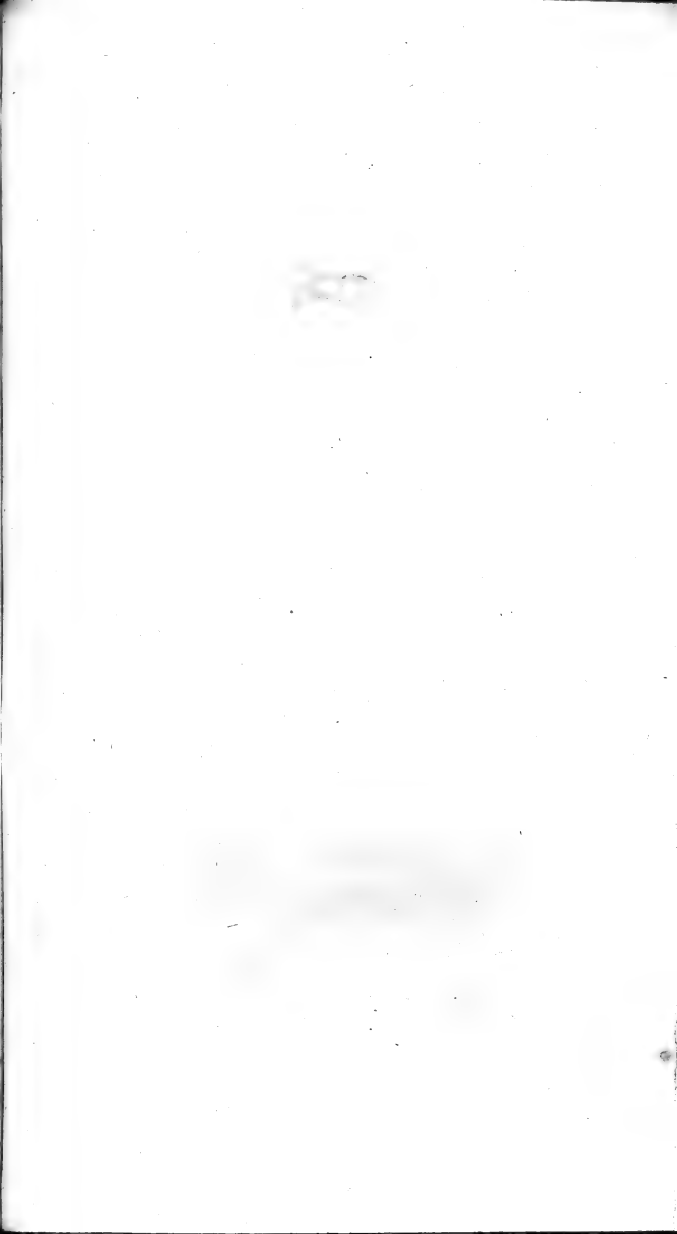
PENGUINS are found both in temperate and in cold climates to the south. Whilst they swim, their heads and necks only appear out
of

ORDER 3
Genus 32



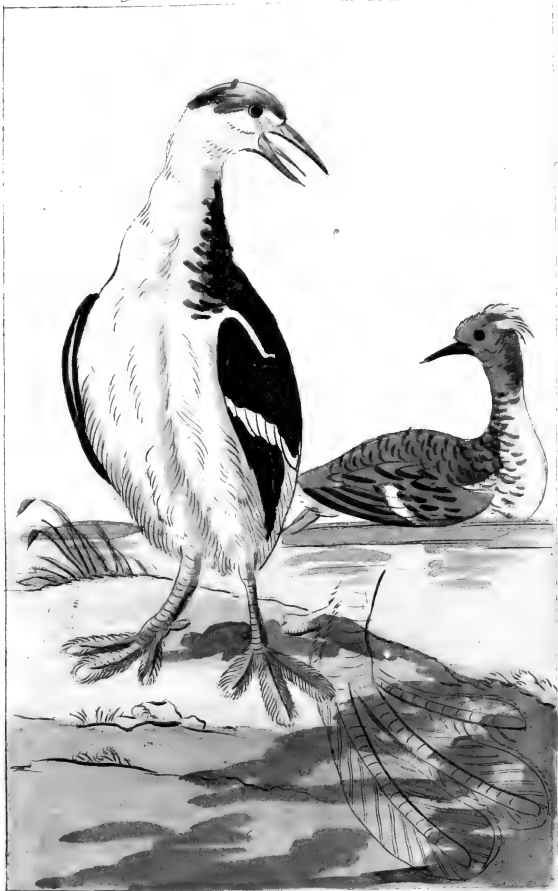
PENGUIN.





ORDER 3

Genus 36 *Colymbus*



GREBES.

and Iceland, and most of the northern parts of Europe. It is found too in Switzerland, on the lake of Constance.

C O L Y M B U S C R I S T A T U S.

T H E G R E B E.

Grebes are easily distinguished by their beautiful tufts, of a silvery white, which are soft as down, elastic as feathers, and glossy as silk.

Their plumage, particularly that of the breast, is a close beautiful down, which neither admits moisture or cold; and such a covering is very necessary for them, as they are constantly on the water, even in the coldest winters.

Their legs are placed very far backwards, and are very unfit for walking, so that they never come to land, if they can avoid it; and for that reason, they generally swim against the wind. If by accident the waves should carry them on the shore, they remain there, in vain attempting with their wings to fly; for, from the situation of their legs, these efforts only throw them forwards. In this state they are often taken, though they defend themselves, by striking very violently with their beaks.

But in the water, the Grebes are remarkably active: they swim, dive, cut the water, and run upon the surface, skimming the waves with astonishing swiftness. It is said, that they never move more swiftly than when they are under water: they dive after fish to a prodigious depth. The fishermen often take them in their nets.

Grebes frequent both the sea and fresh-water lakes. When they build their nests in the hollows of rocks, they must fly into them, because they cannot climb: and their little ones, when they leave the nest, must fall into the water.

Upon lakes, the Grebe builds a floating nest: it is always wet, but it cannot be carried away by the stream, because it is fixed amongst the reeds. The nest is formed of water-plants, of the stalks of the water-lily, pond-weed, and water-violets.

The old Grebe feeds the young ones with eels, and will carry them, when they are tired, on her back. Muffs and tippets are made of the feathers of their breasts, which are very white and glossy, and soft and warm.

There are many kinds of Grebes, and they are of very different sizes. One is called the Great Crested Grebe: this is found on the lakes of Shropshire and Cheshire, and on the fens of Lincolnshire.

The

The Eared Grebe is found in the northern parts of Europe, in Iceland, and in Siberia (Siberia is in Asia). It is found too in Falkland's Islands (Falkland's Islands are near the coast of Patagonia, in South America).—The Tippet Grebe is found on the lake of Geneva, and in many parts of Europe.

The Guillemots, the Divers, and the Grebes, all belong to the genus of *Colymbus*.

But there is this difference—

The Guillemots have three toes, all placed forwards.

The Divers have four toes : the outer toe is the longest ; the back toe is small, and joined to the inner toe by a small membrane.

In the Grebe, the toes are furnished on each side with a broad plain membrane.

GENUS 37. L A R U S.

THE GULL.

The bill is strong, straight, cultrated, bending at the point: on the under part of the lower mandible there is an angular prominence (or knob).

The nostrils are oblong and narrow, wider before, and placed in the middle of the bill.

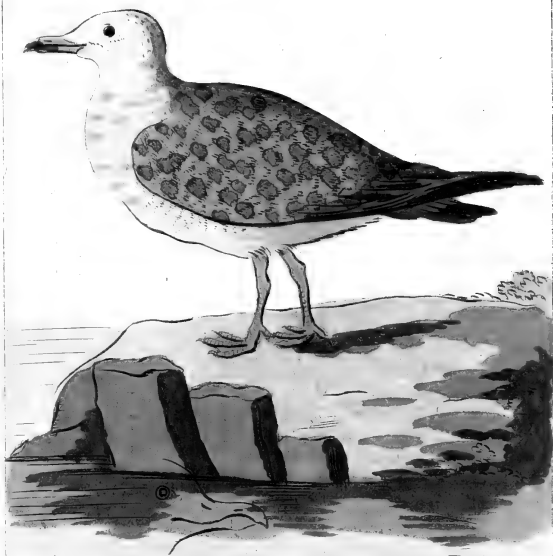
The tongue is a little bifid, or divided.

The body is light, and the wings are long.

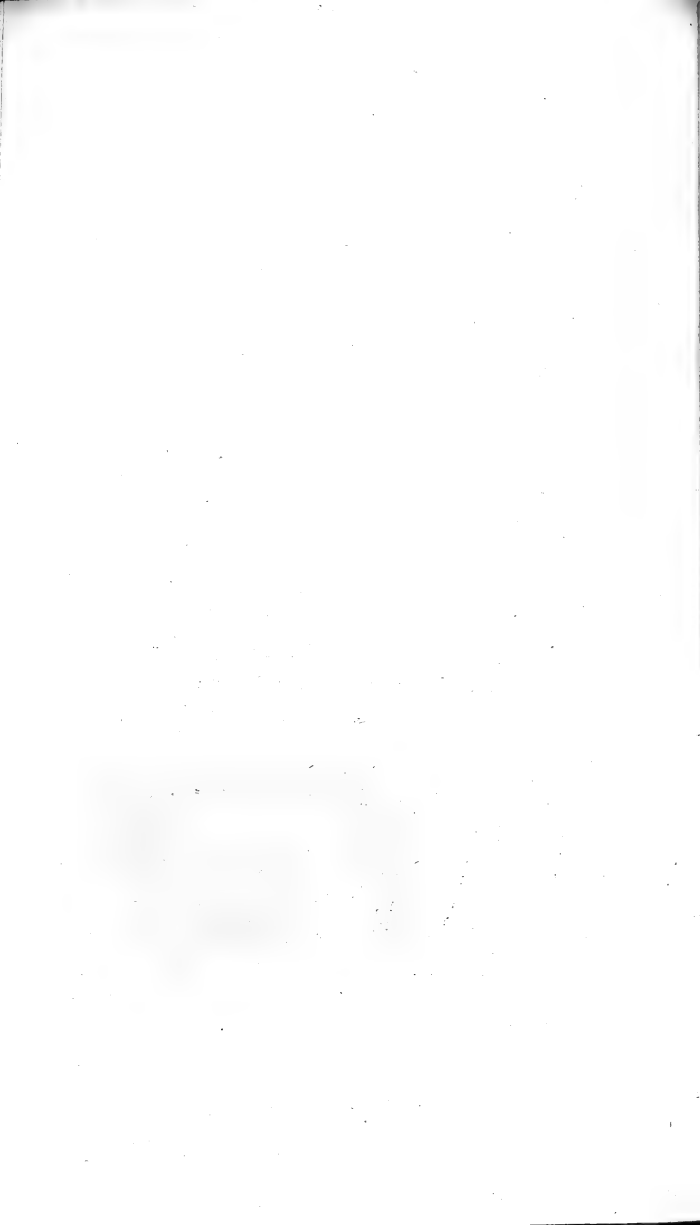
The back toe is small.

GULLS are very noisy, and very voracious. They may be called the Vultures of the Sea, for they devour the dead bodies, of all kinds, that float on its surface, or that are thrown on the shore. Like other birds of prey, they can fast a considerable time. They are very rapacious, and are sometimes caught with a hook, baited with a fish. The three toes before are joined by one web, and they carry their heads almost between their shoulders. They run very fast upon shore, and skim lightly over the waves. They often cover the sands and the rocks with their number, and make them re-echo with their

ORDER 3
Genus 37 Larids.



GULL.



cries : they seem to swarm upon them, some flying, others alighting to repose themselves. It is said, that some of the Gulls in the island of Ferroe are so strong, and so voracious, that they tear lambs to pieces to feed their young. In the frozen seas, they assemble in flocks, upon the carcases of whales. They are found in every climate, and in prodigious numbers. They often follow the tide, to search for fish left on shore, and often retire into the hollow places in rocks, for those that are left there by the waves ; and sometimes they accompany fishermen, to pick up the fish which they may throw away.

When Gulls are kept tame, in gardens, they feed on worms and snails : they can easily pick snails out of their shells.

There are many kinds of Gulls.

The Kittiwake is one kind : it is found in the cliffs of Flamborough-head, in Yorkshire : the bill is yellow, tinged with green. In Scotland, the people are very fond of eating the young ones.

The Tarrock is another kind of Gull : it has a knob only, instead of a back toe ; and on its neck, behind, is a crescent of black feathers, that is, black feathers in the form of a half-moon. Tarrocks attend whales and seals, for the sake of the fish
which

which the Seals drive before them into shallows. The Tarrocks then dart suddenly upon them, and make them their prey.

The Black-toed Gull is found in Denmark. Sometimes it endeavours to conceal itself among cattle: it may then be taken by the hand, perhaps because it may have been tired by a long flight.

The Winter Gull is very common in England, and is found farther inland than many others. It feeds very much upon worms, and frequents meadows far from the sea. There is a substance, very much like jelly, often found in moist places; it is called star-shot, and sometimes star-jelly: this is nothing but worms, that have been in the stomach of the Winter Gulls, or of some other bird, and which they have thrown out, perhaps, because they may have eaten too much, as Vultures sometimes do.

The Laughing Gull is found on the river Don, in Russia, and in some parts of America. It makes a noise like a loud laugh.

The Black-headed Gull makes the same kind of noise: it is found in Lincolnshire, and in Cambridgehire: it builds its nest on the ground. In the Winter, Black-headed Gulls are seen at Aleppo (which is in Turkey in Asia) in great

numbers. They are so tame, that they will come when they are called from the terraces of the houses, and they will catch pieces of bread in the air, which are thrown up to them.

The common Gull is found on our shores in most parts of Europe, on the Caspian Sea, (which is in Asia,) and in many parts of America. It breeds on rocks and cliffs: it picks up worms, and small fish which are left by the tides; and often follows the plough, in fields that are near the shore, to feed upon the worms and insects that are thrown upon the surface, particularly the larvæ, or grubs, of the Cockchafer.

The Glaucous Gull is called by the Dutch, Burgmeister, because it pursues and beats away many other kinds of sea-fowl. It builds its nest on high cliffs, and preys on dead Whales. It attends on the Walrusses, in order to feed on what they leave behind; and it will destroy the young of the Razor-bill.

The Herring Gull lives very much upon Herrings, and sometimes is so bold as to take them out of the nets, almost close to the fishermen.

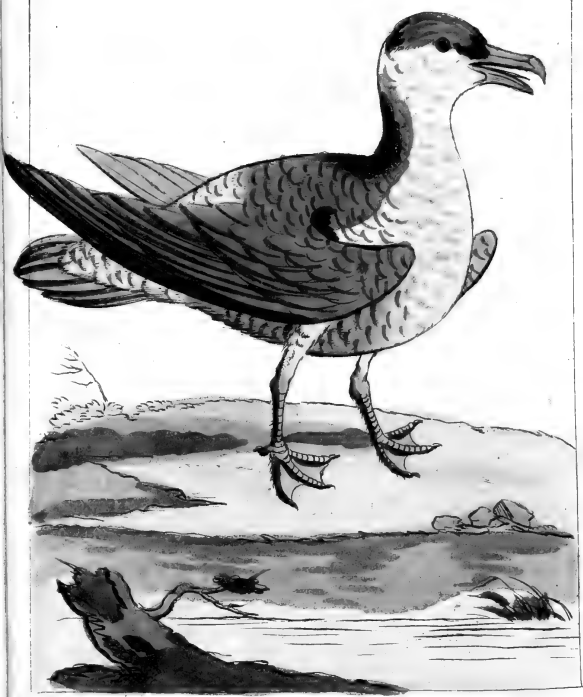
The Great Gull lays its eggs on the sand, without preparing a nest.

The Arctic Gull is very common on the Western Islands of Scotland, and breeds on the heath.

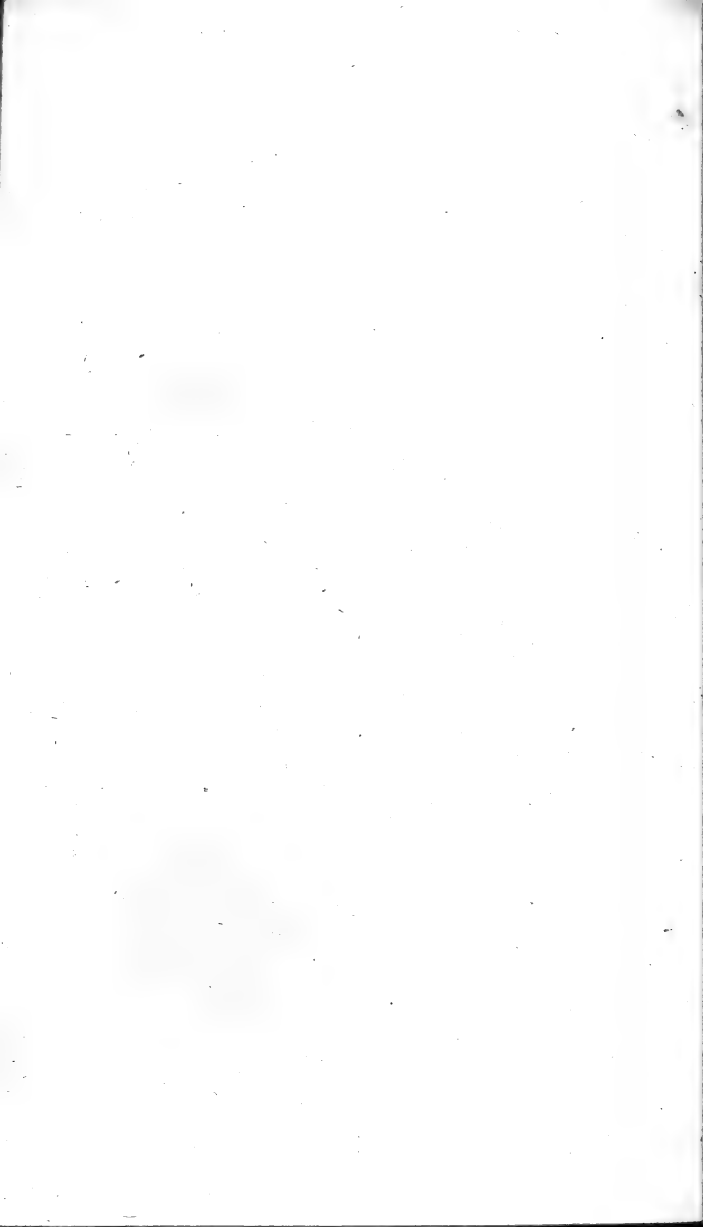
heath. When disturbed, it flies about like a Lapwing, but soon alights. The female makes a nest with grass and moss, on a hillock, in a marshy place, and lays two eggs. It does not often swim; but the Arctic Gull, and the Wagell Gull, fly after other Gulls, and frighten them so much that they vomit up (through fear) the fish which they have taken, and these Gulls catch them before they reach the sea.

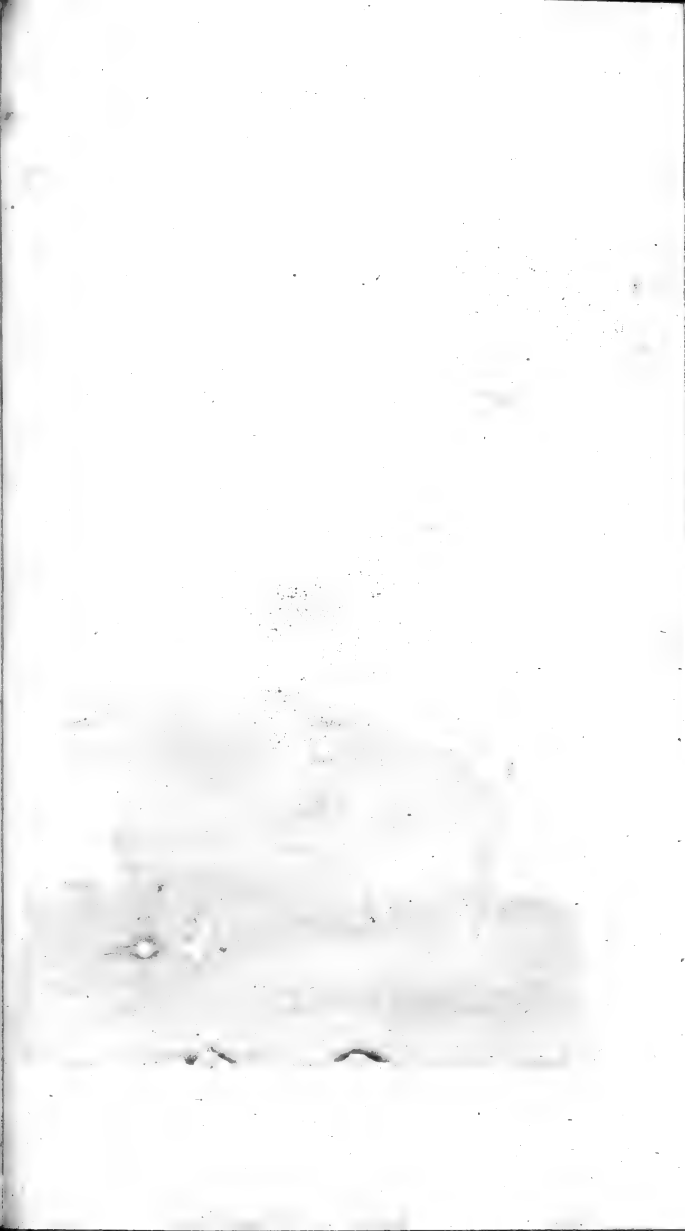
But of all the Gulls, the Skua is the largest. The bill is very hooked at the end, and very sharp: it has a cere over more than half the bill. (The Arctic Gull too has a cere.) Its legs are covered with black scales, and its talons are strong and crooked. It feeds on fish, and on all the smaller kind of water-fowl. The Skua Gull is very bold; for it will fly after Eagles, and drive them away. In the Orknies, the inhabitants are very fond of them, because they prevent Eagles from destroying the poultry. It not only preys on the lesser Gulls, and on other birds, like the Hawk, but it often attacks them on the wing, like the Arctic Gull, to make them throw up the fish which they have swallowed. It will fly with great fury upon those who are so cruel as to attempt to rob it of its young. It builds its nest amongst dry grass; and whilst building, it is
very

ORDER 3
Genus 37

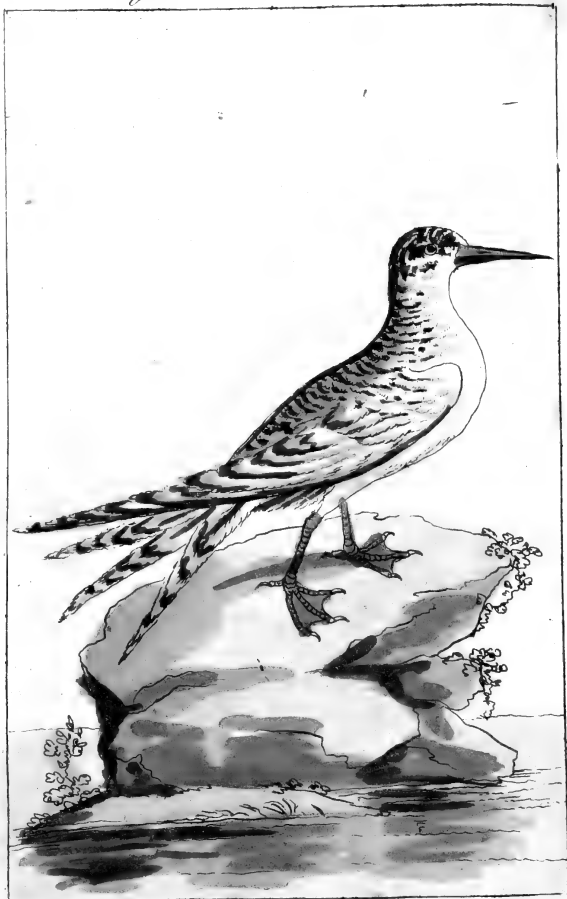


SKUA GULL.





ORDER 3
Genus 38 Sterna.



TERN.

very troublesome to the shepherds who attend their flocks upon the hills.

The shepherds defend themselves by holding a stick, sharpened at one end, above their heads; and the Skua often kills itself upon the stick, as it darts down to attack them.

GENUS 38.

S T E R N A.

T H E T E R N.

The bill is strong, slender, nearly straight, sharp, and a little compressed.

The nostrils are linear (that is very narrow,) and placed at the bottom of the beak.

The wings are very long, and the back toe is small.

TERN S are frequently called Sea Swallows, because in general, they have forked tails; and like Swallows, they have long wings, and are constantly flying near the surface of the water.

The

Terns skim the waves, and seize the little fish that are upon the surface. Their feet have little membranes, drawn back between the toes, which would be of very little use in swimming. They seem to depend only upon their wings, which are very long, and sloped, like those of the common swallow; and they use them, in the same manner, to hover, to sail, to dart through the air, in raising, lowering, stopping, and crossing their flight in many different directions. They seize their prey as they fly, or resting an instant only, on the water: for they are not fond of swimming. They frequent the shore, or lakes and large rivers. They make a loud, piercing, and shrill cry, especially when the weather is calm, and when they rise very high in the air; or when they assemble together in the summer. They are most noisy in the season when they breed; and as they are very numerous, one cannot approach the place where they lay their eggs without being almost deafened by their noise. They come upon the English coast about May: some of them devour insects, which they take in the air as they fly. They are not frightened at the noise of fire-arms; for if one be wounded, others will surround him, and fall with him nearly to the surface of the water.

It

It is observed, that the common Swallow does not much alter the direction of his flight at the discharge of a gun.

Birds of passage, who are so much on the wing, have not the same opportunity as birds who are perched upon trees, or concealed in hedges, of observing, and knowing, their most dangerous enemy.

The legs of Terns are bare of feathers, and the body is covered with a thick down, which is the case with most water-fowl. They are found in the Northern regions; and in the South Sea, which divides America from Asia, and in almost every climate between.

The Noddy is another Tern; his tail is in the shape of a wedge, the body is of a brownish black, the forehead white, with black round the eyes. It is found in the seas, near the coast of America; and is scarcely afraid of man, for it frequently alights upon the masts and the yards of ships, and sometimes upon the hands of the sailors, if they hold them out. Noddies assemble about breeding-time, and fish together in flocks, skimming continually the surface of the sea, to catch those little fish which are crowded together on account of the high winds.

They

They seem to employ themselves in this fishing with great gaiety and cheerfulness, if we may judge from the variety of their cries, which may be heard at a great distance: but they only flock together in breeding time; afterwards they all disperse.

The tail of the common Tern is forked; the two outer tail feathers are half white and half black. They are found in the seas near Europe. The male and the female always fly together. They are very quick and skilful fishers, and digest the fish almost as soon as they are swallowed: that part which is the lowest digests first. The female lays two or three large eggs, in a little hollow in the sand, always sheltered from the north wind; and if any person approach the nest, both the birds attack him, crying very loud and frequently. The female sits on her eggs only in the night, or whilst it rains in the day: at all other times she leaves them to be hatched by the heat of the sun. The young draw themselves along, and leave the nest almost as soon as they are hatched. The parents feed them with pieces of fish, and cover them under their wings at night. But this care does not continue long. The little ones then keep themselves warm by lying close together: and the parents, instead of feeding them with their beaks, let

let the pieces of fish, as they fly above, fall down amongst them. In case of danger, the old birds, as they skim along, inform their young by a cry: they instantly sit, without motion, on the sand, and then they may be picked up like stones, by the hand, for they do not attempt to escape. It is six weeks after they are hatched before they fly: this time is necessary for their wings to grow, for their wings are very long.

The brown Tern, when taken, may be kept tame. Fishermen sometimes catch it, by making a cross of wood float upon the water: to the middle of the cross they fasten a little fish; and to the four corners some bird-lime twigs: amongst these the Tern, as it darts down upon its prey, entangles its wings and is taken. The tail of this Tern is a little forked, the body is grey, the head and beak black, and the legs red.

The lesser Tern has a forked tail, white body, grey back, the forehead and the eyebrows white. It is scarcely so large as a common Swallow. The forehead has a division of white, from whence a streak of white goes on each side, above the eyes. The back is ash-colour; the stomach, the breast, and the lower side of the neck are white; the beak and feet are red.

There

There is another Tern that feeds mostly on insects. Terns of this kind are not very noisy. They lay their eggs in tufts of grass or moss, upon hillocks surrounded with water, or on the banks; they collect a few bents, and make a slight nest: they sit seventeen days on their eggs, which all hatch the same day.

GENUS 39.

R Y N C H O P S.

THE SKIMMER, OR CUT-WATER.

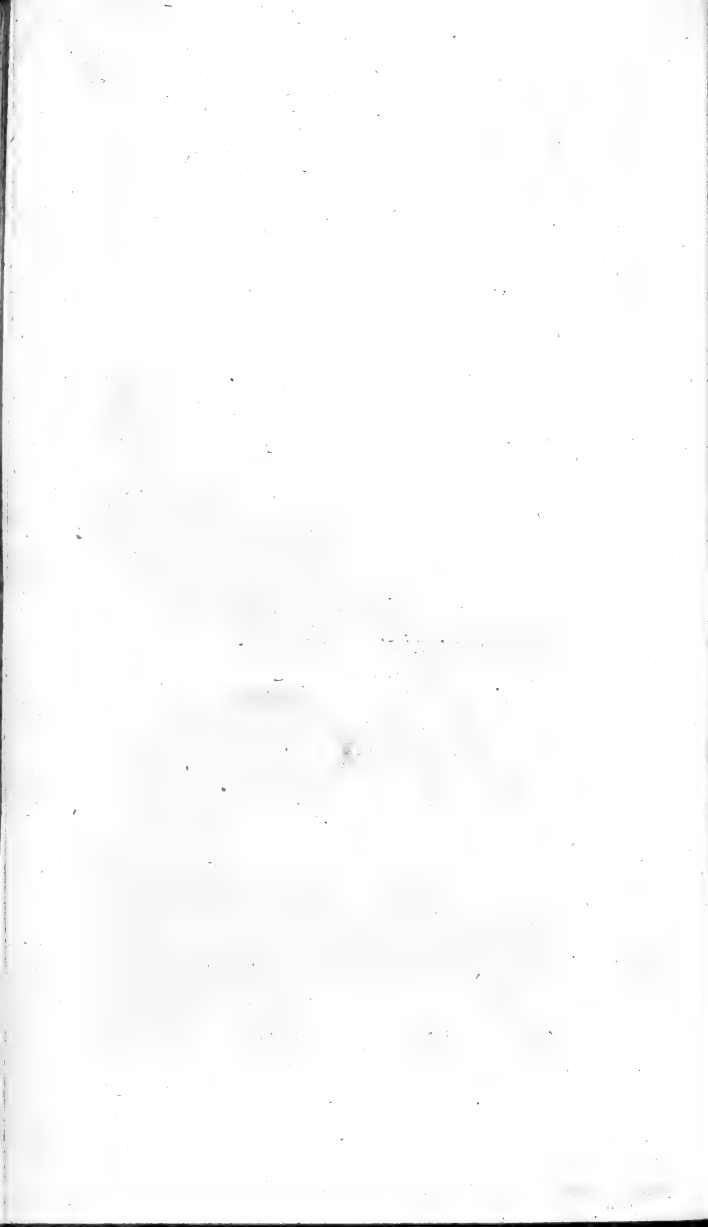
The bill is much compressed, it is straight; the upper mandible is much the shorter; the lower seems as though cut off at the end.

FROM the strange form of its beak, the Skimmer can neither bite with the side, gather any thing before it, or peck with the point, the lower mandible is so much longer than the upper, which only falls upon it as a razor on its handle; so that the bird, in order to feed itself, is obliged

ORDER 3
Genus 39 Rynchops



SKIMMER.



obliged to skim the surface of the water, rippling it with its lower mandible, to catch the fish as it flies. Though its wings be long its flight is slow, that it may the better see the little fish on which it preys. In stormy weather it seeks the shore, and lives on oysters and other shell fish, which, from the form of its bill, it can readily open.

Skimmers are found in the American Seas: their backs are black or dusky, their breasts and stomachs white, and the bill is red at the base:

ALL the Birds which we have been reading about in this volume, belong to the order of the Anseres.

The general character of this order is, that the beak is employed, in some genera, as a kind of sieve or filter to strain the water and stop the food; it is smooth, covered with an epidermis, that is skin, and in many species widest at the end.

The feet are webbed for swimming; the thighs are flattened and short.

The

The body is fat, the skin is tough, the feathers are excellent, because they are more useful than those of any other order of birds; the flesh is rather rank.

They feed in the water upon plants and fish.

The nest, in many species, is built upon the ground.

The mother seldom broods the young.

In many instances, they do not keep together in pairs.

The *Anas* Genus, that is to say, the Swans, Geese and Ducks have a denticulated bill; that is a bill, the sides of which are toothed like a saw; but the teeth are membranous, or like a skin; and the beak has a nail at the end.

The beak of the *Mergus*, or Goosander, has a nail, and it is denticulated; but the teeth are very sharp and slender.

The *Phaeton* Genus, or the Tropic Bird, has a cultrated bill like the *Picæ*, but denticulated.

The *Plotus*, or Darter, has a slender bill denticulated.

The *Rhyncops*, or Cut-Water, has a strong bill, not denticulated, the upper mandible the shortest.

The

The Diomedea, or Albatross, has a strong bill, not denticulated, the lower mandible seems as though it were cut off at the point.

The Alca Genus, or Auk, has a strong bill, not denticulated, with transverse furrows on the sides.

The bill of the Porcellaria, or Petrel, is not denticulated; the nostrils seem to lie along upon it, and are a little cylindric.

The bill of the Pelicanus is not denticulated, and its face is naked.

The bill of the Larus, or Gull is strong, and has a prominence, that is a knob, on the under part of the lower mandible, and it is not denticulated.

The Sterna, or Tern's bill is slender, not denticulated, and compressed at the point.

The Colymbus Genus, that is, the Divers, Grebes, and Guillemots, have slender bills, not denticulated, a little compressed at the sides.

THE more we examine the works of God,
the more proofs we shall find of his wisdom
and goodness: let us then observe his attention
to, and kind care of the Birds, of which we have

just read. Those which were intended to live in the water, have a number of feathers that grow close together ; and their bodies are covered with a warm down, which preserves them from the severe cold. Their feathers too are glossed over with an oil, that prevents the wet from penetrating (that is, coming through) them.

That good Being has furnished them with a little bag of oil, which grows near their tail : all Birds indeed have this bag ; but it is much larger in water-fowls, because they have more occasion for it. When their feathers get rough, they squeeze this oil bag with their bill ; then they draw the bill over their feathers, which makes them smooth and glossy, and prevents the water from wetting them.

We observe too that they have all webbed feet : they use these like oars, in the water, to push themselves forwards ; as they spread them very wide, and strike them against the water, they can move on very fast ; and when they draw them up to their bodies, then they bring their toes close together, so as not to stop their motion.

The Swans neck is very long, because he lives upon fish, and upon weeds which grow under water.

The bill of the Swan, and the Goose, and the Duck are broad, because they gather their food very much out of the mud: their tongues are fringed, and the sides of their bills toothed, or serrated, that they may filter the water through, and only keep behind the spawn of the fish, the eggs, or the larva of insects; or the grain or feeds which they find in the water.

The Auks, place their eggs upon the bare rock, and have been furnished by that good Being, with a kind of glue, or cement, which prevents it from falling.

The Petrels, which inhabit cold climates, besides a warm covering of feathers, are very fat, and abound in oil. This preserves them from the cold; for no animal that is fat is much affected with cold. Mr. RAY has observed pigs, that were fat, lie on the bare ground, exposed on cold frosty nights, without any inconvenience; whilst some pigs, that were leaner, ran shivering into the sty, and seemed to be quite benumbed with the cold.

Albatrosses have long wings, which enable them to take very distant flights, and to seize the Flying Fish the moment that they quit the water. Whilst the Penguins have scarcely any wings;

indeed they could have but very little occasion for them, because they live only upon fish, which they take under water. For this reason, that good Being has placed their legs much more backward than those of most other birds. This enables them to dive astonishingly well, and to pursue, and to overtake the fish, even in their own element.

How wonderful is the contrivance of the Pelican. His pouch is a kind of magazine, in which he can store away a number of fish; and yet it is so contrived by that wise and good Being, that it shall keep the fish cool, and without spoiling.

The Gannet, one of the Pelican species, has strong wings. He darts like lightning into the water, to a prodigious depth, after his prey: he is provided with a very quick sight, that he may see the fish at a distance, and he has a covering to preserve it.

The long neck of the Darter enables him in an instant to strike his prey, and is another proof of the care that that good Being has taken for his preservation.

In the Divers, the legs are placed remarkably backward: they are flat and broad, and admirably contrived to enable them to dive, to dart forward, and

and turn in every direction under water ; so that the fish can scarcely ever escape them.

The long wings of the Gull, and the form of his legs, which are well contrived for running, are admirably fitted to his way of life, either to seize the fish as they rise to the surface, or to catch those that the sea has thrown upon the shore.

The beak of the Skimmer, and his manner of feeding, are perfectly suited to each other.

How various, how wonderful, are the several forms, and instincts, and habits of animals ! What skill appears in their structure ; what wisdom in their instincts ; and what goodness in that provision which a bountiful and benevolent Creator has made for them all ! Every part of the creation shews his wisdom, and partakes his care. “ He feeds the Raven, and clothes the Lilies of the Field.”

E R R A T U M.

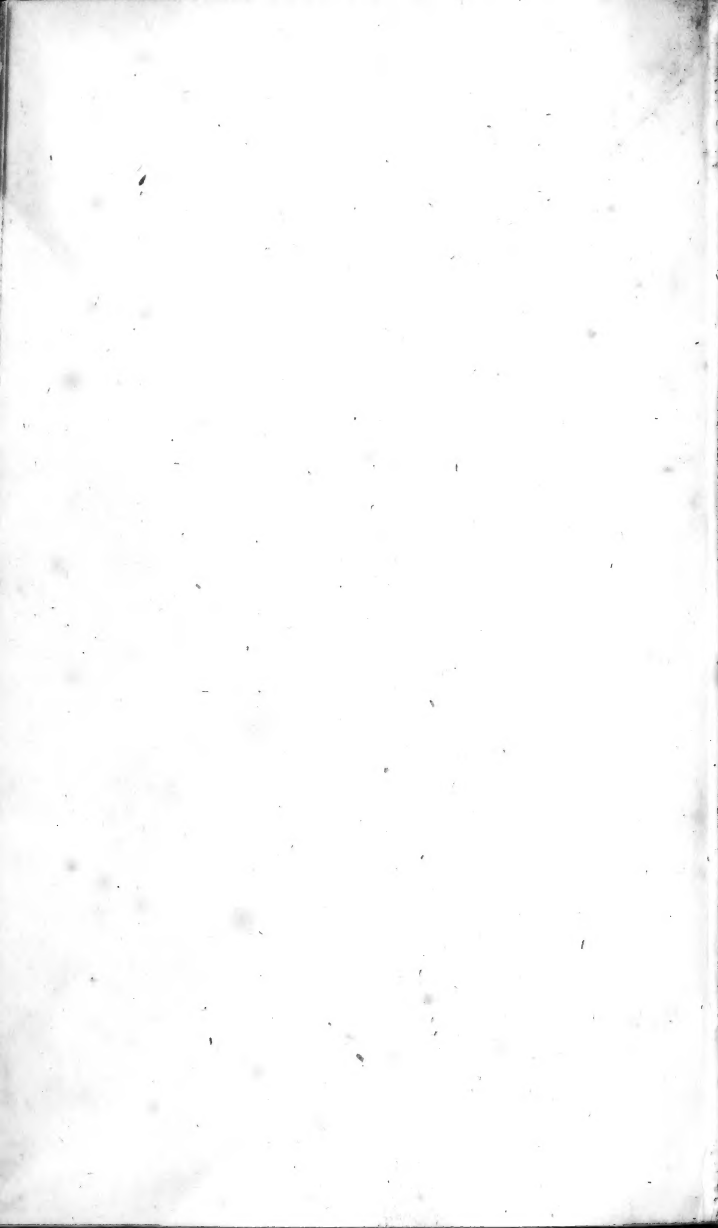
Page 11, line 8, after *Island*, read, *called the
Beering Goose.*

DIRECTIONS *for placing the* PLATES
in PART II.

S W A N	<i>to face</i>	Page	4
Canada Goose	- - - - -	10	
Eider Duck	- - - - -	12	
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Puffin	- - - - -	28	
Petrel	- - - - -	29	
Albatross	- - - - -	34	
Penguin	- - - - -	36	
Pelican	- - - - -	39	
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Darter	- - - - -	50	
Tropic Bird	- - - - -	51	
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